

CANADA
DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NATIONAL MUSEUM OF CANADA
Bulletin No. 157

AN INTRODUCTION TO THE ARCHÆOLOGY
OF SOUTHEAST MANITOBA

BY
Richard S. MacNeish

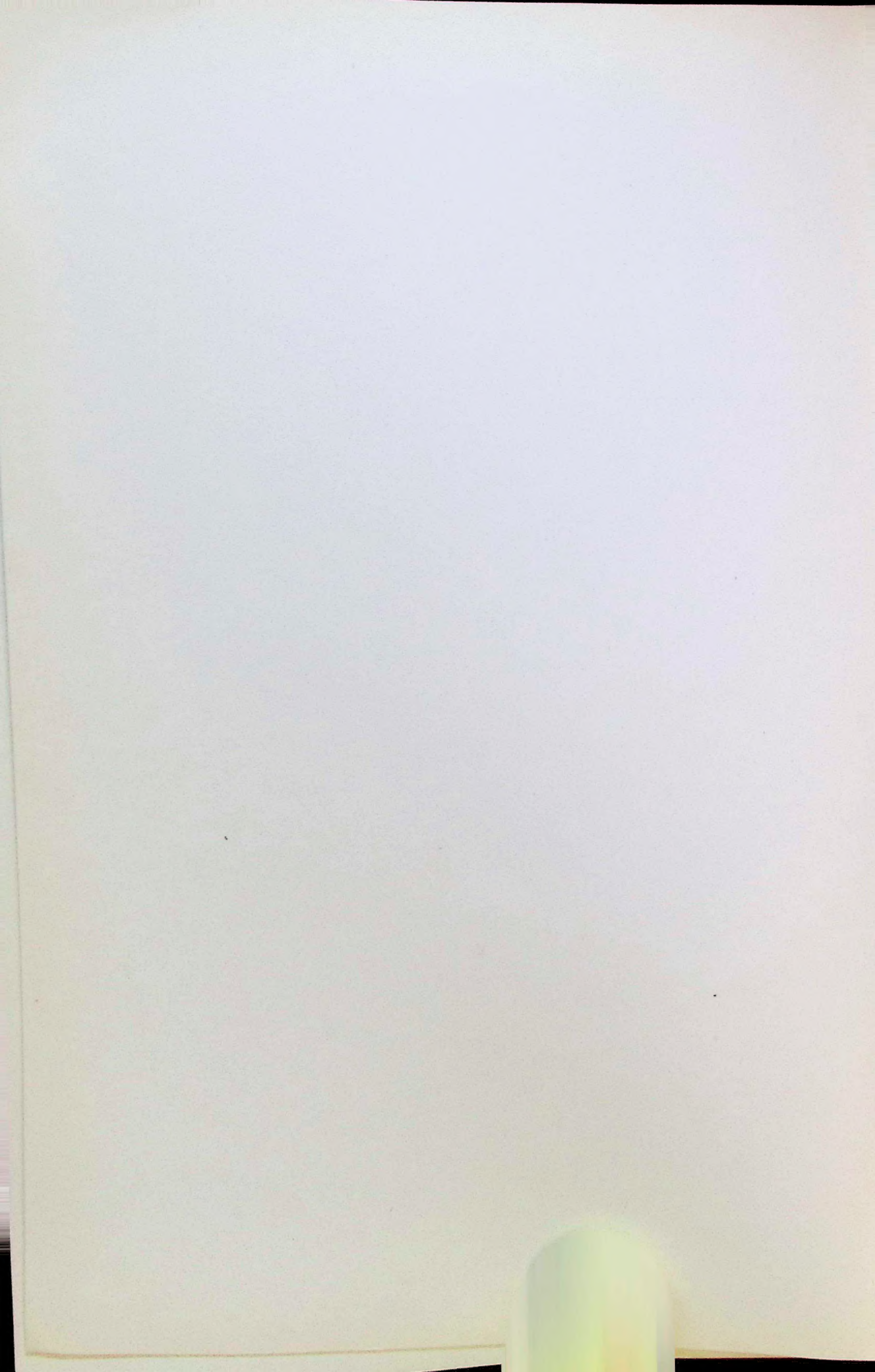
1958











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ANTHROPOLOGICAL SERIES No. 44

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BY

Richard S. MacNeish

Issued under the authority of
The Honourable Alvin Hamilton, M.P.,
Minister of Northern Affairs and National Resources,
Ottawa, 1958

DEPARTMENT OF NORTH AMERICAN AFFAIRS AND INDIGENOUS SERVICES

NATIONAL MUSEUM OF CANADA

Bulletin 12

AN INTRODUCTION TO THE ARCHAEOLOGY
OF SOUTHEAST MANITOBA

Edmond Cloutier

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1958

Price \$1.00 Cat. No. R93-157

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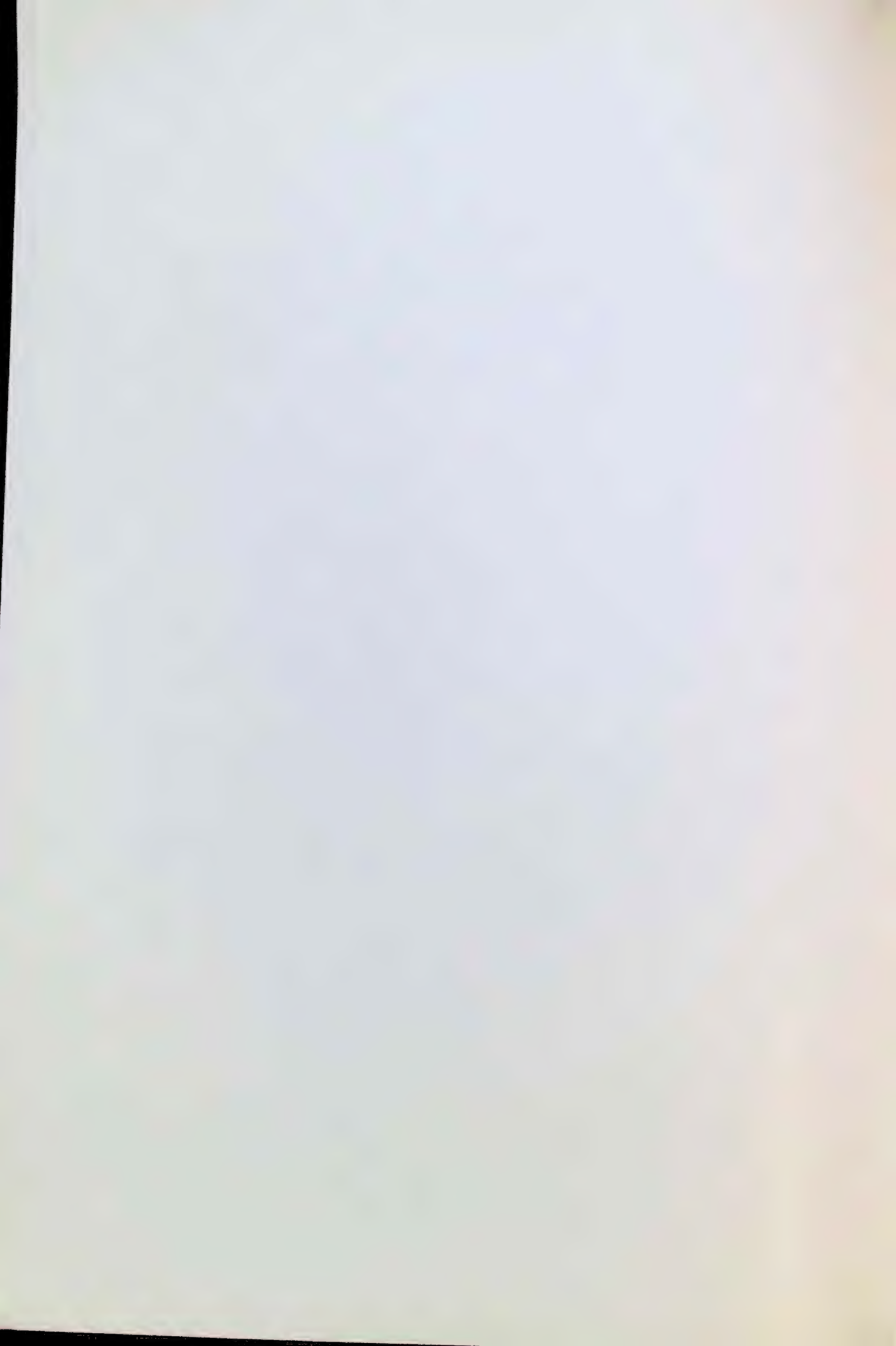
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PREFACE

As enjoyable and gratifying as the finding of new archæological materials in Manitoba were the associations with those who gave their co-operation during the investigations. The late Dr. J. L. Johnston, Manitoba Provincial Librarian, was particularly helpful both in giving an archæological permit to work in this province and in facilitating the work by every other possible means. As one of my friends once remarked, there is a direct correlation between how well a professional archæologist works and the quality of the local amateurs. To four Winnipeg amateur archæologists in particular, namely, Miss Winona Downs, Mrs. R. K. Helyar, Mrs. P. H. Stokes, and Mr. Peter Grant, my thanks go for their untiring co-operation and help. I also wish to thank other amateur archæologists who gave their assistance. These were the late Gordon Hoover of Melita, Dr. Ralph Bird and his family of Brandon, Mr. Chris Vickers of Winnipeg, Mr. Fred Thomson of Portage la Prairie, Mr. Fred Cason of Gilbert Plains, and Cecil Patterson of The Pas, then Forest Ranger at Lac du Bonnet. Besides these very helpful interested few, my hosts at the archæological sites were not only very hospitable but most helpful and include the Larter family of Parkdale, the Tuokko and Waulkinen families that live along the Pinewa Channel, Mr. J. Casey of Casey's Shows, and members of the Manitoba Park Service in the Whiteshell area. I would like to thank them one and all.

In the field I was assisted by Boyd Wettlaufer, Jerzi Zaborski, and Douglas Ternent. To these helpers, as well as to a large number of local labourers, I am indebted, for without their assistance the excavations would never have been done.

I also am appreciative of the aid given by Dr. James B. Griffin of the University of Michigan and Mr. Peter Grant, who read and criticized the manuscript before publication.



AN INTRODUCTION TO THE ARCHÆOLOGY OF SOUTHEAST MANITOBA

CHAPTER I

INTRODUCTION

THE REGION

Southeast Manitoba, the area with which this report is concerned, is bounded on the south by the 49th Parallel and on the north by the 52° parallel and extends from 95° to 98° longitude (*See Figure 1*). Within this small area of Canada there is a considerable range in topography, flora, and fauna. It seems worthwhile, therefore, to describe briefly the environmental background of the Indian occupations.

In the easternmost part of this area, i.e., east of a line from the Lake of the Woods to Lake Winnipeg, are to be found outcrops of Precambrian granites. Three almost equally wide strips of Palæozoic rocks, comprising Ordovician, Silurian, and Devonian limestones, are found from the eastern edge of the Precambrian Shield to the edge of the Manitoba escarpment, which extends roughly from Morden to Dauphin, Manitoba. The southwestern part of Manitoba is underlain by younger Cretaceous shales. These outcropping rocks of southern Manitoba were later modified by glaciation.¹

Ice-sheets flowed across Manitoba from at least two different directions.² An early ice-sheet (Cary) flowed southeast across Manitoba. The portion of this ice-sheet west of the escarpment retreated to the northwestward, while the ice east of the escarpment flowed southward into the United States. As the northwestern lobe retreated, a series of glacial lakes formed in southwestern Manitoba. One of the better known of these glacial lakes has been called Lake Souris. Somewhat later, the lobe east of the escarpment retreated northward and formed Lake Agassiz I in the Red River basin. This lake discharged southward down the Minnesota River. Eventually, with further northward retreat of the ice-sheet, this lake drained to the east through Lake Nipigon. Somewhat later, another ice-sheet advanced from the northeast, probably the Valdres ice-sheet of the late Wisconsin period. With this advance, a second lake (Lake Agassiz II) formed, because the northeastern outlets were blocked; this lake also discharged to the south. This last glacial advance took place roughly 11,000 years ago. Gradually the ice of the Valdres sheet retreated to the northeast, reopening the eastern outlets and causing Lake Agassiz II to diminish in area. Finally, the lake drained northward into Hudson Bay, and about 5,000 years ago the southeastern section of Manitoba became, for the most part, lake-free. Then the Red, Assiniboine, and

¹ Johnson, 1934.

² J. A. Elson, 1955.

Winnipeg rivers began eroding Lake Agassiz sediments. About 3,000 years ago an alluvial terrace was built in these river valleys. From that time until the present these rivers have been cutting through this alluvium.

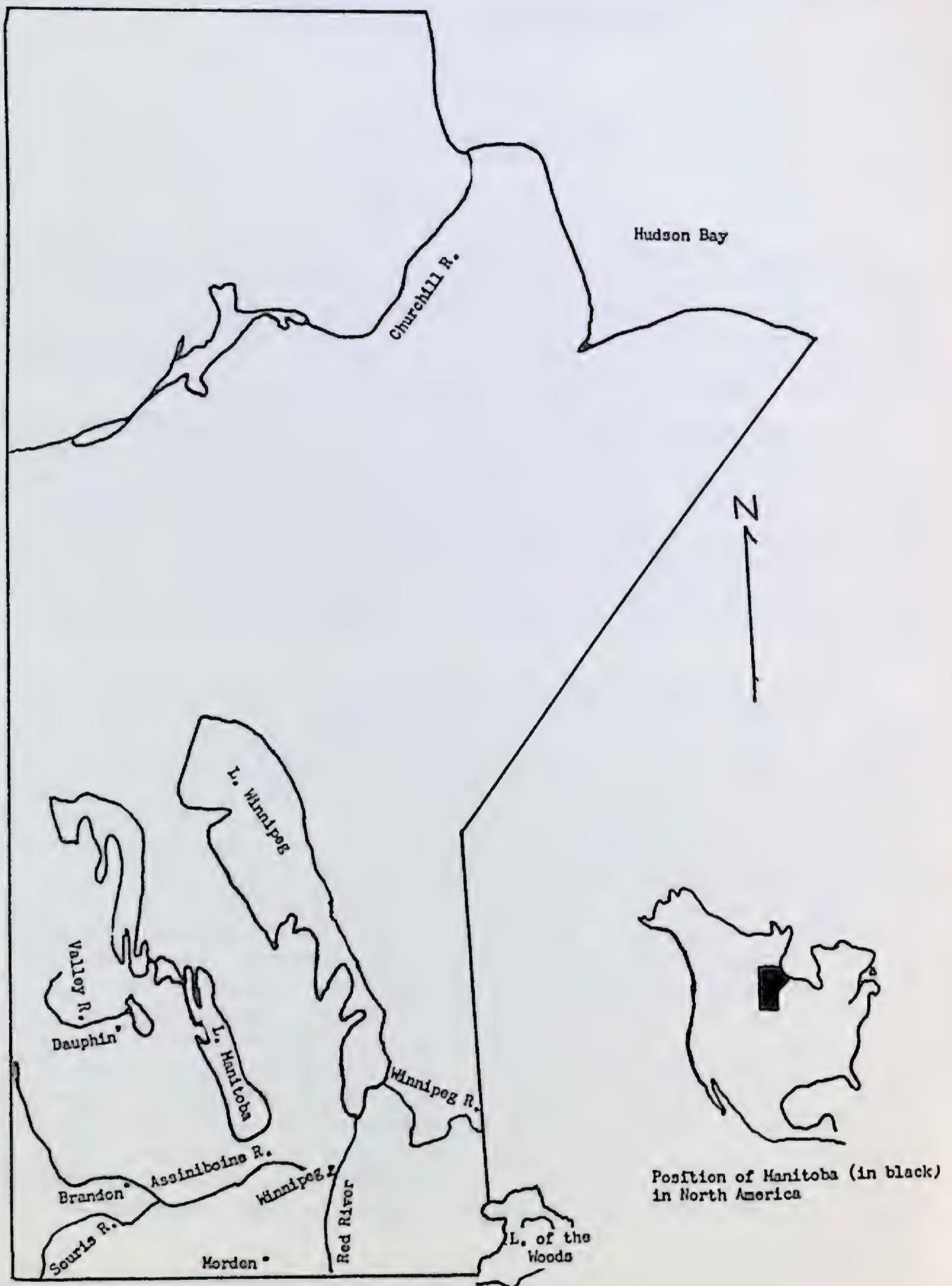


Figure 1. Map of Manitoba.

The physiography resulting from these phenomena is rather varied.³ In easternmost Manitoba, in the area of Precambrian rocks, the country is rolling and is characterized by a multitude of small lakes and swamps commonly connected by a few westward-flowing streams. Soils over this terrain are podzols (forest soils). Gravelly glacial deposits may be found occasionally in this territory, as well as sand deposits that represent beaches of extinct lakes. Along the western edge of this zone there is a low irregular escarpment, along which are found remnants of Lake Agassiz beaches. From the edge of this escarpment westward to the Manitoba escarpment the terrain is flat and is cut only by a few streams and rivers. The soil is mainly clay and represents the ancient bed of Lake Agassiz. The Manitoba escarpment bears a series of low sandy ridges, which represent Lake Agassiz strandlines. West of the escarpment is an undulating plain from which rise several small uplands such as the Moose and Turtle mountains. The plain area is deeply cut by rivers, former glacial spillways, such as the Souris, Assiniboine, and Valley rivers. Several shallow basins that were once glacial lakes occur on the plain.

The rolling zone on the Precambrian Shield is covered by part of the northern boreal forest. Spruce, willow, and pine are the predominant trees. In early historic times this region abounded in a variety of forest fauna including black bear, muskrat, moose, elk, white-tailed deer, fox, and beaver. The Lake Agassiz basin area has a very different vegetation in that it is part of the Aspen Parkland. Here are grasslands in the broader, more wind-swept portion, while the flanks of hills are covered by poplar, burr oak, and elm. Box elder and maple grow in the bottoms of valleys. In early historic times black bear, bison, elk (wapiti), deer, coyote, and wolf roved in this zone. Within historic times this Aspen Parkland spread westward and now covers most of southwestern Manitoba. However, early explorers' and settlers' reports reveal that the area west of the Manitoba escarpment and south of the Assiniboine River was probably part of the true prairies where grasses predominate. Animal life was similar to that of the Aspen Parkland except that bison were more common and antelope sometimes were present.⁴

When the white man first entered Manitoba there were four major tribes in this province.⁵ Along the coast of Hudson Bay, north of Churchill, were the Eskimo who had obvious affiliations with other Eskimo groups along the Arctic coast and islands from Labrador to Alaska. Inland from the Eskimo, generally north of the Churchill River, wandering bands of Chipewyan (or Caribou) Indians lived. These spoke an Athabaskan language like the inland tribes of the Northwest Territories, Yukon Territory, and Alaska. North of the Assiniboine and east of the Red River, Lake Manitoba, and Lake Winnipegosis were the Cree who spoke an Algonkian tongue and were related to those tribes to the east of Manitoba. In the southwest corner of Manitoba lived the Siouan-speaking Assiniboine (or Stonies) who had linguistic affiliations with various Sioux groups in the north-central parts of the United States. After 1800 another Algonkian-speaking group invaded southeastern Manitoba. These were the Chippewa, Ojibway, or, as commonly called in Manitoba, Saulteaux. Late in the

³ Johnson, 1934.

⁴ Bird, n.d.

⁵ Jenness, 1932.

19th century a few Sioux, after their revolt in Minnesota, escaped from the United States Army and settled in south-central Manitoba. The Sioux and the Saulteaux need not concern us in this report since most of their early history seems to have been outside the area studied. This is also true of the Chipewyan and Eskimo, who were north of the area. Thus the two major groups occupying the area of Manitoba in which we have made archæological investigations were the Assiniboine or Stonies, and the Cree.

According to Alexander Henry the younger, the Assiniboine in the last part of the 18th century occupied a large portion of the northern plains and prairies. Henry gives as the boundaries for their domain the Red River on the east, the Assiniboine west to the junction of the north and south branches of the Saskatchewan at Prince Albert, the south branch of the Saskatchewan to Fort Vermilion, from Fort Vermilion to the Battle River, and then southeast from the Battle River to the Missouri River, down the Missouri as far as the Mandan in North Dakota, and back to the Red River of Manitoba.⁶

The Assiniboine speak a Siouan language which is closely related to the Yankton Dakota dialect.⁷ Traditions of the Assiniboine and Sioux have it that they separated from each other, possibly in northern Minnesota, during the 16th century. This has often been interpreted as indicating that the Assiniboine moved into Manitoba and the Canadian prairies and plains after that date. Lowie notes that such a tradition of recent separation from the Yankton Sioux is not borne out by the philological (linguistic) evidence. As we shall see, Lowie's doubt as to the recent date of the invasion of Manitoba by the Assiniboine is in agreement with the archæological data in this report.

Physically the Assiniboine are much like other northern plains tribes, being relatively tall and dark-skinned and having jet-black hair, round heads, wide cheek-bones, and rather prominent hooked noses. In fact, the face portrayed on an American five-cent piece may be considered to represent a typical Assiniboine.

In early historic times, population estimates of the Sioux varied considerably. Renville guessed in 1823 that there were 28,000 belonging to this tribe. However, less extravagant estimates by most other authors of this period give figures between 8,000 and 10,000.

The Assiniboine economy was based mainly upon buffalo (bison) hunting. Some buffalo, as well as other prairie animals, were undoubtedly hunted by individuals or small groups. Early observers of the Assiniboine often mention, however, that buffalo were hunted by a very large group or the whole local band. In such communal hunts V-shaped fences that led to either a circular enclosure (pound) or the edge of a bank or a cliff, were usually built. Often in the centre of the enclosure or on a cliff just below the end of the fence, a medicine pole with charms suspended from it was erected. Once the herd was sighted, the members of the tribe lined up on either side of the fence and drove the herd toward the funnel-shaped passage. The herd was driven into the enclosure or over the bank and then killed. During such communal endeavours, the chiefs and medicine-men, assisted by the young warriors, organized the activity and kept discipline.

⁶ Henry, 1809.

⁷ Lowie, 1910.

Once the herd was killed, the meat was divided among the various members of the tribe, and honours and special pieces were given to the various members of the warrior groups or to the chief. The greater part of the diet of the Assiniboine was obtained in this manner, but some other game, of course, was hunted and trapped by individual warriors. Often the meat was roasted on spits or directly on the embers or hot stones of the fire. Occasionally it was made into stew in clay cooking pots or in skin receptacles heated by dropping hot rocks into it. Some of the more northern Stonies are recorded as fishing with nets and weirs, and some mention is made of food-collecting. The Assiniboine to the east evidently gathered wild rice in season, and all groups occasionally ate various kinds of roots and berries, seeds, pulverized insects, and, occasionally, the inner bark of the cypress.

One household industry was working in clay, making either earthen pots or pipes. Woodwork consisted mainly of making bows and arrows, bowls, spoons, and so forth. The manufacture of knives, arrow points, and scrapers was carried out by flint-knapping. In the literature, some mention is also made of the production of bone tools such as awls and skin scrapers. The preparation of skins was, of course, an important industry, both for the manufacture of clothing and conical buffalo-skin tents. Leggings were one item of clothing. They were often decorated with porcupine quills or engraved designs, and the outer seams often had strips of coloured quills or painted human or horse hair. The upper part of the body was covered by a skin shirt, which was even more ornately decorated along its outer seams and in the chest area, with bells, deer hoofs, elk teeth, and beads and necklaces commonly added to the colourful ensemble. Moccasins were also of a distinctive type, adorned with porcupine quill designs. Head-dresses consisted of wolf-skin caps, feathers, or skin bands. The hair was often braided and then decorated. During certain ceremonies and on certain occasions, parts of the face and body were painted red, brown, or black. The costume was further enhanced by decorated armlets, square bags, shields, drums, saddle ornaments, and by various weapons and tools hung with fringe or feathers.

Before the birth of a child, the father left the lodge or tent. Several women and often a female medicine woman or midwife attended the mother at the birth. The umbilical cord was kept and placed in a small bag to be carried by the child as a good-luck charm. Often the father gave presents at the birth of the child. Its name was based upon some revelation the father or one of his relatives received in a dream.

For the first five or six years of life, children were, for the most part, relatively undisciplined and had no specific duties. Then the basic division of labour began; boys learned the activities of their fathers and girls the household work. By marrying, girls eventually escaped from their positions as servants. No restrictions on pre-marital sexual relations seem to have existed, and the early explorers frequently commented on the sexual laxity of these people. If the parents of a girl objected to her lover as a suitable husband, there might be an elopement. The formal procedure for matrimony was rather elaborate. Usually the suitor gave a series of gifts, often horses, to the girl's brother or father. Then, if the suitor was acceptable, a feast was prepared, and the father of the girl announced that the suitor was to visit his daughter. There followed a series of rather complex gift exchanging, taking of positions at the feast, and arrangements

for sleeping, which served as the marriage ceremony. Polygamy was fairly frequent, with the better warriors or young men rich in horses taking more than one wife. There were restrictions on the young married girl in that she was not allowed to speak to her father-in-law, and her husband to neither his father-in-law nor mother-in-law.

At about the time of a young man's marriage, or shortly before, he usually entered the most enjoyable phase of his life. At puberty, a youth usually retired to an isolated place for a period of fasting during which he received a vision of some animal that became his guardian spirit. It was during this time that a young man was made a member of a series of age-group societies, of which the highest was the soldier society. War activities and the acquisition of horses were very important. The actual war itself was usually just a small skirmish with well-regulated rules of conduct and honours. The most important of these honours was the counting of coup, that is, the touching of a wounded enemy with a special stick, while the stealing of horses, the successful leadership of a party, and so forth, were other meritorious actions. It was the duty of the members of soldier societies to act as police during buffalo hunts and the frequent movements of camps. The members also participated in a series of ceremonies, such as the horse dance, the sun dance, the buffalo dance, the fool's dance, and the grass dance.

A particularly wealthy individual, that is in terms of horses, or a successful war leader was considered a chief, and his tent was given a special place within the camping circle of conical three-pole tents. His authority was limited and was mainly over the various societies during times of crises. In addition to chiefs, some medicine-men, or men who had received special power through dreams or fasting, were important. Medicine-men were divided into two classes, "root doctors" who actually did curing, and the holy men who led ceremonies, gave advice, and distributed various kinds of charms. These holy men also were usually familiar with the various myths concerning creation and natural phenomena, as well as with supernatural beings and beliefs. Among the Assiniboine berdaches, there also existed males who took on female duties and functions.

After death, individuals were washed, their hair was combed and braided, and their faces were painted by their relatives; the relatives also arranged for the disposal of the body. During the early period of White contact, it was apparently the custom to inter the deceased in a sitting position within a mound, but at a later time the body was placed on a scaffold or in a tree. Usually, various personal effects of the deceased, as well as bison skulls, were placed with the body. Sometimes white dogs were killed to accompany the dead to the spirit world. Mourning was shown by the cropping of the hair, and the marriage partner remaining unwed for a long time. Since most of the belongings of the deceased were buried with him, there were few problems of inheritance, but often some of his horses were distributed to his sons, and the rest were turned loose.

The other main tribe at early historic times in southern Manitoba was the Cree,³ a group quite different from the Assiniboine. Bands speaking the Cree dialect occupied a vast territory from Lake Nitcheguon in interior Labrador in the east, to Lake Athabasca in northern Saskatchewan and

³ Skinner, 1912.

Alberta. In general, the domain of this tribe was south of Hudson Bay and the Churchill River and north of the Saskatchewan River and the larger lakes of Manitoba, north of the 50th parallel in Ontario, and north of the lower one-third of Quebec.

This tribe speaks a dialect of Algonkian, a language that is widespread in the eastern part of North America and includes the dialects of the Blackfoot and Cheyenne of the Great Plains. On the basis of the wide distribution of Algonkian-speaking peoples, often at the fringes of the continent, as well as the amount of dialectical variations within the Algonkian-language family, many anthropologists consider this group to have been early migrants into the New World. Skinner guessed the original home of the Cree to be around James Bay. During the 18th century, stimulated perhaps by the western expansion of the Hudson's Bay and the Northwest Companies, the Cree tribe spread northwest as far as the British Columbia-Yukon border. Generally speaking, the Cree had unfriendly relationships with all its neighbours except the Ojibway and Assiniboine, and even with these there were occasional conflicts.

In the early 19th century, estimates of population for this group varied between 16,000 and 20,000—a much smaller population density than that recorded for the Assiniboine, when one considers the vast area that the Cree occupied.

Physically the Cree are quite different from the Assiniboine. Neumann considers them to belong to the Sylvid sub-race of the American Indian.⁹ Characteristically they are tall and thin with narrow high heads, and although they have wide cheek-bones, their faces are elongate and their noses straight and thin.

The Cree usually lived in small bands of two or three families, which occasionally joined other bands during the summer months. Although they subsisted on hunting and moved their homes frequently, they were not so nomadic as the Assiniboine, who had to follow the buffalo. Rabbits, which were obtained by snaring, comprised their most dependable food. However, when possible they shot caribou or buffalo with bow and arrow or drove them into a corral. Moose were stalked with a bow and arrow. Beaver were taken by snaring and by chiselling into their winter homes, and bears were killed with a spear or bow and arrow. Usually there were special ceremonies attached to the hunting and killing of bear. Ducks, geese, and other fowl were caught in snare nets or shot with arrows with blunted tips. In the summer, fishing was important, and both gill nets and fish spears were used. The occasional summer plant-collecting was mainly confined to berries, wild rice, and a few roots.

Meat was, as a rule, roasted. Some of it was dried and smoked and often pounded and mixed with berries. Some small amounts of meat were boiled in pottery vessels or in stone-heated birch-bark vessels. Wooden spoons and dishes were used for eating.

Transportation in the warmer part of the year was by canoe and in the winter by snowshoe. During historic times they adopted from the Eskimo the dog-drawn toboggan—a way of travel contrasting with that of the Assiniboine who moved with horses and dogs drawing a travois.

⁹ Neumann, 1952.

Wood-working was an important industry. Items included snowshoes, toboggans, spears, spoons, and bowls. Many of these were whittled into shape with knives, but celts and adzes were used for felling large trees. Birch-bark was employed to make baskets, rectangular pots, and a variety of other objects. Many of these birch-bark implements were decorated by etching. Also baskets or nets were woven from birch-bark or small twigs and roots. Pottery was evidently made during the earliest historic period, but shortly after White contact, clay receptacles were replaced by copper kettles. Bone tools were common and included fish spears, awls, needles, beamers, and scrapers. By the end of the 18th century flint-knapping had been abandoned, and European tools replaced the flint ones.

As might be expected with forest people, the working of skins was an important industry. On their lower limbs, men wore moccasins plus skin-tight leggings with a fringe running down the seam on the outside of the leg. These leggings extended up to a breach clout. Instead of the over-the-head shirt, they used coats, open down the front, and hoods made of buckskin, caribou, and rabbit skins. Both the breach clout and part of the coat were ornamented with porcupine quills, often dyed blue. Women wore a single-piece sleeveless dress of leather with string shoulder straps and a belt. They also wore puttee-like leggings and moccasins.

Unlike the Assiniboine, who lived in conical tents of buffalo hide, the Cree occupied either conical structures covered with birch-bark and moss or oblong dome-shaped birch-bark-covered houses.

No special ceremonies attended the birth of a child, and children were pampered and idolized by their parents until adolescence. Small girls, however, did help their mothers, and boys, of course, learned the hunting crafts of their fathers. Pre-marital sexual relations were condoned, but marriages were usually arranged by the parents without consideration of the wishes of the children. Until the birth of the first child, a man usually lived with his wife's parents; then the young family joined the band of the husband's parents. The early explorers are consistent in their remarks about the hardships and drudgery of the woman's life from marriage until death. Men, of course, spent most of their time hunting to keep their families and themselves alive in this relatively harsh environment. When boys reached puberty, they usually underwent a ceremony and a period of fasting in isolation to receive visions of their guardian spirits. They also joined a medicine society called the Midéwin under the direction of a medicine-man. This society undertook various ceremonies connected with war and hunting and the curing of the sick. The medicine-man who led these societies did considerable conjuring and received revelations from dreams. These medicine-men were much more powerful than the so-called chiefs; the latter had little real authority and were usually either the best hunters or the best warriors. War was considerably less formal than among the Assiniboine and consisted usually of small raids, organized by an individual who dreamed about the war party and gathered around him a few friends to undertake it.

At death there were usually special ceremonies and a feast. Grave goods were placed with the body during much lamentations by the relatives and friends of the deceased. At the earliest historic times the dead were placed in a flexed position in shallow graves, but by the end of the 18th

century scaffold or tree burials seem to have become more common. The property of the deceased was usually destroyed. The Cree had fairly well-defined gods who controlled the universe and its creation. There were also various evil spirits of the woods, and for each individual there was the special guardian animal or god that had come to him during the period of fasting at adolescence.

So we see that when the White Man first reached southern Manitoba he found two quite distinctive peoples living side by side in rather different environments.

PROBLEMS AND METHODS

The variety of environments and the two different tribal groups in pre-historic northern Manitoba posed a series of archæological problems. First, a survey was needed to ascertain just what types of archæological materials and sites occurred in southeastern Manitoba. The next question was that of the temporal sequence of these archæological materials and complexes. With the chronological framework of Manitoba prehistory established, further questions still remained. Would it be possible to trace the development and spread of the tribes found in historic times in Manitoba through archæology and thereby supplement or correct the historical conclusions based on ethnology? Certainly the ethnological data do not fully explain when the Siouan-speaking Assiniboines came into Manitoba and what kind of culture they had when they first arrived. Do the Assiniboines really represent a recent migration into Manitoba that at one time was entirely occupied by Algonkian-speaking people, or do the Assiniboines represent an ancient group in Manitoba whose territory had been invaded on all sides by Algonkians? The ethnological data concerning the Cree also pose problems. Did the Cree invade Manitoba? Was Manitoba once the home of Algonkian-speaking people such as the Blackfoot, Cheyenne, Cree, and Gros Ventre, who later moved out into the plains and westward? Intimately tied up with these problems is the reconstruction of the way of life of each archæological period in the sequence of cultures in southeastern Manitoba. What cultural changes have occurred? Were they due to various adaptations of the environment, diffusion, migration, or multilinear development?¹⁰

Connected with these problems is the question of extra-areal relationships of the prehistoric cultures of Manitoba. The geographical position of Manitoba suggests that pottery and burial mounds diffusing from Asia through the Canadian Northwest might have passed through Manitoba on their way to the Eastern Woodlands. Only archæological investigation can answer this question.

In this initial endeavour the first step was an archæological reconnaissance of southern Manitoba. In 1951 Boyd Wettlaufer undertook a survey of the region and discovered 149 sites. Later surveys by me with the assistance of Jerzi Zaborski and Douglas Ternent, brought to light another 42 sites. A perusal of the records in the National Museum of Canada revealed further materials and the location of 51 additional archæological sites. This gives a grand total of 242 sites. Initially in the survey the sites were numbered serially, but later they were put into the uniform

¹⁰ J. Steward, 1953.

site designation system recommended by Dr. Charles E. Borden of the University of British Columbia.¹¹ Furthermore, their exact locations were placed upon 8-miles-to-the-inch Topographical Survey maps, and these were filed in the National Museum. Besides locating the sites, whenever possible materials were collected from them, and photographs were made of collections belonging to private persons or institutions other than the National Museum of Canada. Then a survey book was made. This survey book consisted of photographs of archaeological sites and their materials, as well as a survey sheet that gave the location of the site, the owner, the possibilities of excavation, the general physiographic features, and an opinion about the archaeological materials. This survey is still continuing.

It was felt that it was necessary first to excavate stratified sites. These would give a chronological framework for the area and indicate a sequence of artifacts as well as archaeological complexes. During 1951, I excavated the stratified Lockport site (EaLf-1), and in 1953 the stratified Cemetery Point site (EaKv-1) was dug (*See Figure 2 for site locations*). As we shall see, the stratigraphy of these two sites provided an outline of culture sequence in Manitoba.

Once stratified sites had been excavated and something of the sequence of archaeological complexes ascertained, single-component sites were dug. These sites were selected on the basis of the survey and preliminary analysis of the archaeological sequence at Lockport. We endeavoured to dig sites that had archaeological materials from only one part of our archaeological sequence. These sites were expected to throw light on the way of life at the various time periods in prehistoric Manitoba. Furthermore, three of them were excavated for the purpose of ascertaining the non-perishable material culture of the Assiniboine and Cree at earliest historic times. In 1951, the Alexander's Point site (EdLb-1) was dug, because it revealed the type of material culture possessed by the Cree at the time of White contact. The Stott Mound, near Brandon, Manitoba, was dug in 1952,¹² and the Old Fort site near Portage La Prairie in 1953. These latter two sites probably represent Assiniboine materials in association with materials of the early White explorers.

The single-component sites, named Larter (EaLg-1) and Anderson (EbKw-1) were excavated in 1951 to fill out our picture of various parts of the prehistoric sequence, while in 1953, the Sturgeon Falls (EaKv-2), Waulkinen (EbKw-3), Tuokko (EbKw-2), and the United Church sites¹³ were excavated for a similar reason.

In the archaeological excavations of these sites the usual archaeological methods were employed; these will be described in our site descriptions.

Once the archaeological materials had been unearthed, washed, and catalogued (in the system of the National Museum of Canada), the analysis began. The materials of the stratified Lockport site were the first to be studied. Initially the artifacts were divided into a series of general classes such as pottery, projectile points, scrapers, and so forth. Then each specimen of each of these classes was laid out according to the level in

¹¹ C. Borden, 1952.

¹² MacNeish, 1954.

¹³ MacNeish and Capes, 1958.

which it was found. These specimens were then studied, and types or trial types were established.¹⁴ These types were set up to illustrate more clearly the cultural changes that had taken place and to establish time-markers of the various parts of each sequence. Next, the same thing was

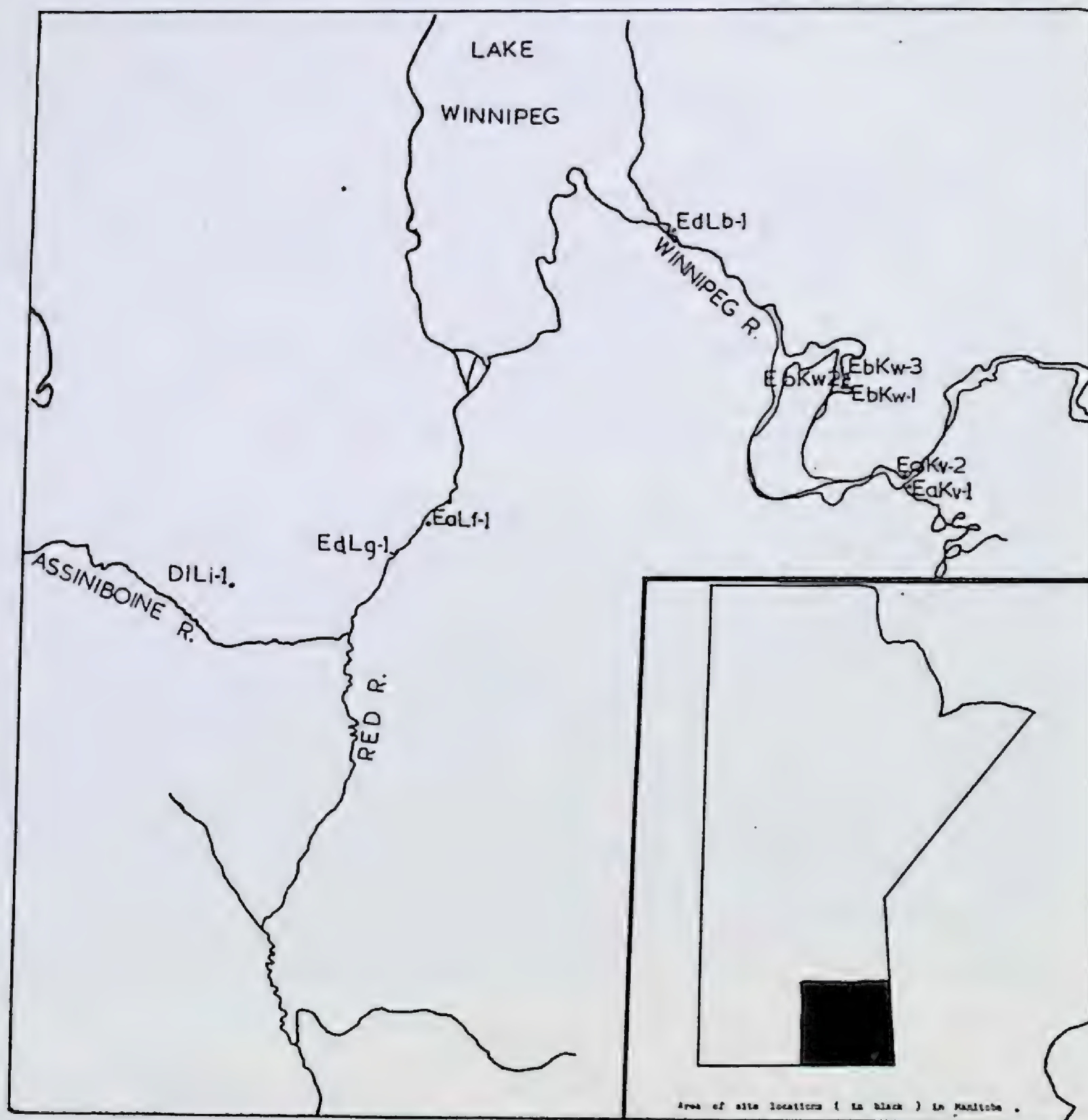


Figure 2. Map of archaeological Sites.

done for the Cemetery Point site, and the results were compared with Lockport and the types or trial types confirmed or modified. Then all the types from all the occupation levels of the Lockport site were examined. Each occupation level was considered to be a component,¹⁵ that is, a single occupation of a single area by a people with a single artifact complex.

¹⁴ Krieger, 1944.

¹⁵ Cole and Deuel, 1937.

It soon became obvious that at both Lockport and Cemetery Point different levels or components had rather distinctive artifact complexes. A comparison of the various artifact complexes from Lockport and Cemetery Point revealed that some of these components were very similar. Further comparisons and analyses were undertaken then with non-stratified sites. Again it became obvious that in some cases several components shared a single artifact complex. Each of these recurring artifact complexes was considered a focus;¹⁶ i.e., we thought that those various components which shared an almost identical artifact complex represented different occupations by the same people. Once the sequence of foci was established and the content of each of the foci understood, we began to re-examine them to see if it would be possible to date them. In this attempt to date the foci, we were sometimes able to use geological evidence, but most often we used the technique of cross-dating. This meant comparing our foci and artifact types with those from other areas, some of which had foci already dated by Carbon 14 determinations. Besides setting a fairly accurate chronology for our various archæological cultures in Manitoba, this set of comparisons revealed the relationships of the cultures of southeastern Manitoba to those of other areas. From all these data we have attempted to make a tentative reconstruction of the prehistory of southeastern Manitoba.

In the following pages, I first describe the archæological sites—their location, how they were dug, and what we found. Next, I discuss the basis for the cultural sequence and the dating of our archæological materials. The various archæological foci of Manitoba are compared, one with the other, to determine cultural continuities and discontinuities. Comparisons between the Manitoba foci and archæological foci from other regions are undertaken to determine prehistoric cultural relationships. Finally, an attempt is made to reconstruct the archæological sequence of culture in prehistoric southeastern Manitoba. Detailed discussions of types and their significance have been relegated to the Appendix. In large part they are the basis for the conclusions in the main part of the report, and as such, they are of importance to the professional archæologist. To avoid unduly boring the lay reader, however, I have put them in a separate section.

¹⁶ Cole and Deuel, 1937.

CHAPTER II
EXCAVATIONS
THE LOCKPORT SITE
(EaLf - 1)

This archæological site is situated on the east bank of the Red River immediately north of the Lockport bridge and the outcropping of limestone that formerly caused the Lockport rapids in the Red River (*See* Figures 2 and 3 and Plate I). The site extends about 1,000 feet north of the bridge and occupies part of the lower and upper terraces. Artifacts occur on the surface from the river-edge to 600 feet back (east). The river-bank itself revealed a good cross-section of the site from north to south and indicated that the darkened soil or refuse layer was about three feet deep at the bridge, that it gradually thickened to about six feet 400 feet north of the bridge, and that it then thinned out and disappeared 1,000 feet north of the bridge along the river. Fortunately (but unfortunately from the standpoint of future excavation and preservation of the site) during my excavation in 1951, Casey's Shows dug an east-west trench for drainage pipes from the carnival buildings on the high terrace down to the river's edge. This trench revealed refuse about one foot thick along the western edge of the high terrace that thinned down to 6 inches along the bank. On the lower terrace, refuse thickened from 6 inches at the eastern edge of the terrace to 5 feet along the river-bank. Members of the Natural History Society of Manitoba informed me that before the 1950 flood, which destroyed about fifty feet of the river-bank, the maximum depth of the refuse was 7 to 8 feet. Thus the east lower terrace just below rapids was the area showing greatest occupation. If the present conditions reflect prehistoric ones, this area was adjacent to one of the parts of the Red River most abundant in fish. (As we shall see, there is ample evidence to indicate that the site was often used as a fishing camp by the Indians.) Also, since the west bank at the rapids is exceedingly steep, it seems likely that any portage trail around the rapids would have passed over the low terrace on the east side, so I suspect that the site was sometimes used as a portage camp.

Excavation

The Lockport site has been known for a considerable length of time. The Reverend George Bryce opened a mound across the Red River from the site in 1879,¹⁷ and I suspect that either he or Donald Gunn¹⁸ in 1867 removed the contents from the two mounds just east of the Lockport site. C. N. Bell, in 1886, speaks of mounds in the general area of Lockport,¹⁹ as does Professor Henry Montgomery in 1908.²⁰ Dr. Tyrrell of the

¹⁷ George Bryce, 1904.

¹⁸ Donald Gunn, 1867, p. 399.

¹⁹ C. N. Bell. Letter to Am. Antiquarian and Oriental Inst. in 1886, Vol. VIII, pp. 108-109.

²⁰ Henry Montgomery, 1908.

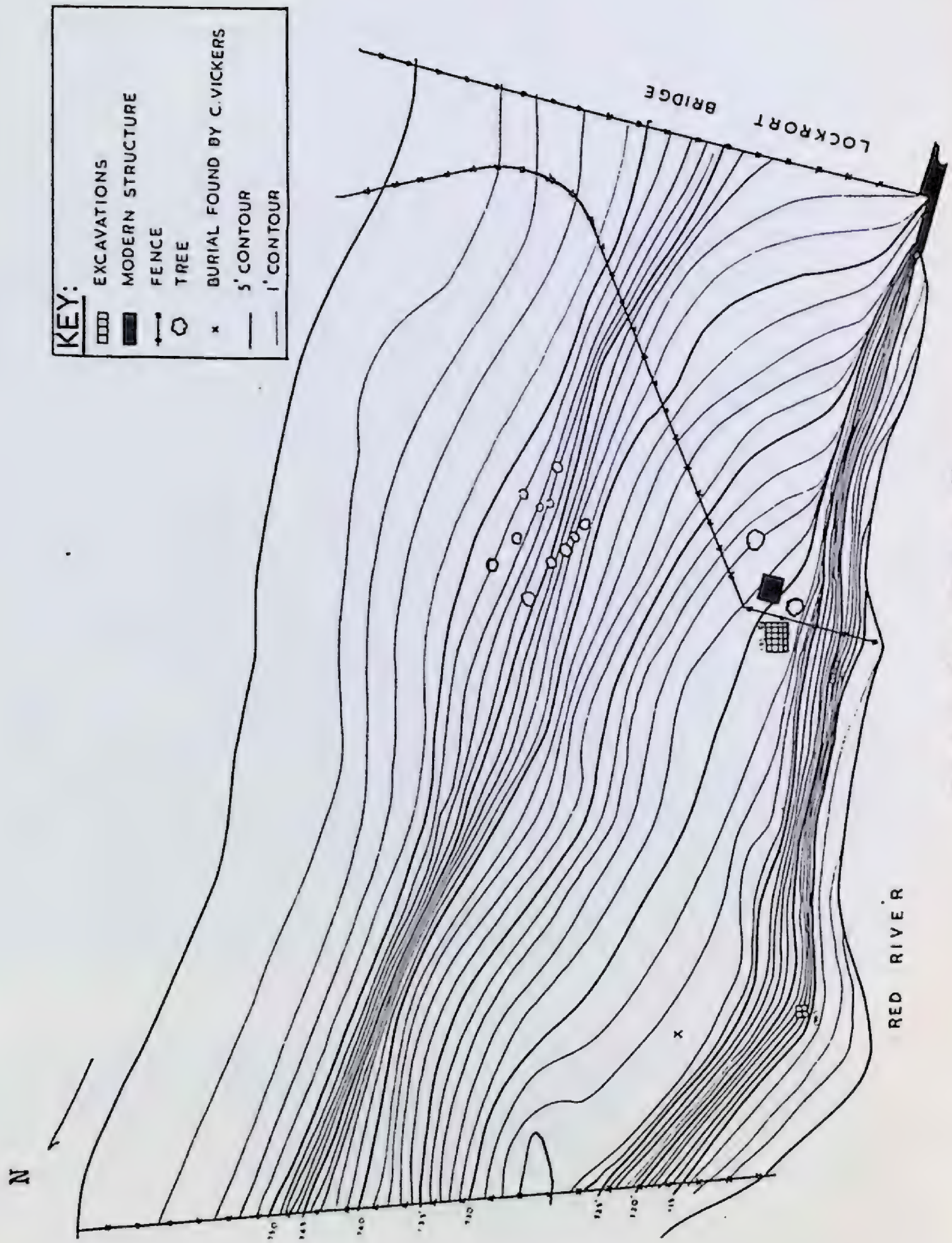


Figure 3. Map of Lockport Site.

Canadian Geological Survey collected sherds from the village site at Lockport, and Nickerson, in his report to the National Museum of Canada in 1915, mentions the village site itself. In the 1920's and 1930's, Mr. Rand of the Manitoba Museum and members of the Natural History Society of Manitoba made extensive collections from the Lockport village site. Surface collecting continued until 1947 when Thad C. Hecker of North Dakota and Walter Hlady of Winnipeg, Manitoba, accompanied by members of the Natural History Society of Manitoba, sunk six test holes into the site. The 1947 excavations indicated the stratigraphic potentialities of the site. In 1950 Chris Vickers rescued a burial and associated materials from the flood-torn lower terrace at Lockport.

In 1950 I made a brief survey of the site. An examination of the bank exposed by river-cutting revealed a considerable depth of refuse (from 3 to 7 feet) as well as a series of superimposed burned floors. Furthermore, a surface collection netted a wide variety of artifacts which were unlikely *in toto* to have belonged to any one time period or any single cultural complex. All this indicated that the Lockport site had a good possibility of cultural stratigraphy and might reveal a considerable amount of pre-historic cultural change. Therefore, arrangements were made for an excavation in the spring of 1951.

Since it was probable that the area with maximum depth of refuse would reveal most clearly the cultural changes, a trench 15 by 25 feet oriented roughly north and south was set up at the edge of the bank about 400 feet from the bridge (The contour map, Figure 3, locates this trench exactly in terms of the first east bank cement pilaster of the bridge). The 25- by 15-foot trench was divided into fifteen 5-foot squares by means of stakes placed 5 feet apart along the north-south and east-west axes. The most westerly north-south axis was called an O axis, while the most easterly (15 feet east) was called East 15 (E 15) with the two axes in between being called East 5 (E 5) and East 10 (E 10). The southernmost of the east-west axis was also called the O axis, while the northernmost was North 25 (N 25) with east-west axis in between being North 5 (N 5), North 10 (N 10), North 15 (N 15), and North 20 (N 20). Thus every stake has two numbers, one from the east-west axis and one from the north-south axis. Squares were named after the stake in their southeast corner. A one-foot contour was made after the excavation, though datum depth of stakes was taken before digging.

After the stakes had been set and preliminary photographs of the area taken, excavation began in two alternate east-west squares (for example, N20E5 and N20E15) (*See Plate II*). Originally it was planned to dig the squares in arbitrary 6-inch levels, but it soon became apparent that there were clearly defined strata that could be peeled off. Therefore a combination of 6-inch levels and stripping of actual strata was generally used (*See Figure 4*). Usually, a 6-inch level, called Level 1, was first removed. This included mainly the humus and a little refuse under it. Then the refuse down to the sand strata was peeled and called Level 2. The sand strata was removed in either one or two levels (called Levels 3 and 4). In the refuse below the sand a 6- to 8-inch level (Level 5) was removed down to just above a thin sand stratum. The refuse just above and below this sand layer became Level 6. The refuse below this was removed in arbitrary 6-inch levels until yellow clay was reached (Levels 7 to 9 or 10).

PLATE I. Lockport Excavations.

1. Looking westward toward the excavations on the bank of the Red River.
2. Looking east across the Red River at Lockport site. The arrow indicates area of excavation.



1



2

Two layers were then removed in the yellow clay, Level 11 going from the top of the yellow clay down below the first burned floor and the second layer, Level 12, going well down below the second lower burned floor. Features (such as pits) when encountered were cleaned off, drawn, photographed, and removed. Also, we were ever on the watchout for rodent holes and materials from rodent holes which would confuse the cultural stratigraphy. We found some and discarded the materials in them. When a square was completed, the profiles of the four walls were drawn.

Once the two original east-west alternate squares were removed, the squares in between were taken out, thus forming a 15-foot trench, 5 feet wide. Profiles were again drawn, and a photograph was made of the entire 15-foot walls. This general technique of excavation was continued until all but four of the fifteen squares were removed.

Inclement weather and construction had closed this excavation in 1951, and we had been unable to obtain a complete north-south profile that would connect the various strata and levels of all squares. Therefore, in 1953, a 5- by 25-foot north-south trench was dug about the western edge of the previous excavation. The technique of excavation was the same as previously described.

In 1953 two other minor salvaging excavations were also undertaken. One excavation was carried out 42 feet south of our main trench along the edge of the bank. Here the contents of a bell-shaped pit (Pit 5) had been exposed by river erosion. Since visitors had already removed some artifacts from this area, we excavated it. The other was also a pit (Pit 6) that construction had exposed along the bank 138 feet north of the site. We also salvaged the remaining artifacts from it.

Before passing on to the stratigraphy, it is necessary to mention briefly some of the excavations that occurred before those of the National Museum of Canada. Chris Vickers' excavation of a burial occurred in 1950 just after the flood waters had subsided. The flood had gouged an elliptical hole in the lower terrace (*see* map for location), and part of a burial was exposed. By careful excavation he found that a burial pit, elliptical in outline, had been dug from about 6 inches below the surface to a depth of about 20 inches. Into this pit had been placed a dog and a tightly-flexed human skeleton lying on its left side, as well as part of a clay pot and bone scraper. These had then been covered by three large limestone slabs and the pit filled.

The other excavations were undertaken by Thad Hecker of Bismarck, North Dakota, and Walter Hlady of Winnipeg, Manitoba, who were assisted by local amateur archæologists. They sunk six test pits into the site. Four of these were 5-foot squares excavated in arbitrary 6-inch levels. Since no map of their excavations was drawn, they cannot be exactly located, but two seem to have been north of the National Museum excavation, and two were south of it. The other two test pits were somewhat larger. One about 200 feet north of our excavation was 5 by 20 feet, while the other, 15 to 30 feet to the west, was 10 by 10 feet. In both these larger excavations, the top 10 to 12 inches were removed and the materials discarded; then the excavation proceeded, and materials were removed in arbitrary 6-inch levels (numbered 1 to 6 or 7). Thanks to Walter Hlady, Dr. James B. Griffin, and the Manitoba Museum, I have been able to

examine what was uncovered as well as to see drawings of the walls of these trenches. However, in this report I shall only mention what was found in the 10- by 10-foot trench, as it was fairly close to our trench and its stratigraphy seems to be connected.

Stratigraphy

In the discussion of the stratigraphy I shall, for the most part, confine my conclusions to those based upon the National Museum's excavations in 1951 and 1953 (See Figure 4 and Plate II). However, occasionally I shall refer to the data obtained from the study of the river-bank, the profiles of Hlady's and Hecker's 1947 dig, and the archæological salvage work of Chris Vickers.

Underlying the excavations was a stratum of rounded boulders set in tight-knit yellow clay. This stratum is called Zone I. Level 13, without cultural material, came from this zone. In the area of excavation the top of this layer occurred at a depth of 6 to 7 feet below the surface. North of our excavation it became progressively closer to the surface, while to the south it became deeper. Above the boulders and clays was a zone of tight-knit yellow clay. South of the site it was extremely thick and without cultural features, while to the north it was somewhat thinner, sometimes with a burned floor in it. In our excavations it was possible to divide this stratum into two zones. The lower part, called Zone H, was a yellow clay overlain by a burned floor (Floor 1). The upper part, Zone G, was yellow clay that imperceptibly faded into a grey clay and had patches of a burned floor (Floor 2) in it. In excavation, Level 12 came from Zone H and Level 11 from Zone G.

Above Zone G was about a one-foot layer of brownish grey clay, which seemed to overlay the yellow clay covering most of the site. Levels 9 and 10 came from this stratum, called Zone F. In the excavation there were patches of sand overlying this zone, which seem to mark its separation from Zone E, a layer of dark refuse composed of clay, sand, and charcoal. In the excavation, Level 8 usually came from this layer of transition and included artifacts from the top of Zone F, the bottom of Zone E, and the patches of sand. Zone E, from which came Level 7 and part of Level 6, was capped by a well-defined sand strata, Zone D, which in turn was capped by another layer of sandy dark refuse, Zone C. Level 5 came from the top of Zone C, while Level 6 partook of the lower part of Zone C, all of Zone D, and the upper part of Zone E. South of the 1951 excavation, Zones E, D, C, B, and A are well marked, but to the north Zones D and B seem to be missing, and Zones A, C, and E seem to blend. As far as the 1947 excavations of the 10- by 10-foot test pits are concerned, Levels 1 and 2 seem to have been taken from Zone C, Level 3 from Zones C, D, and E, while Levels 4 and 5 came from Zone E, and Level 6 consisted of part of Zone F.

In two areas of Zone C in Level 5, there were charcoal strata full of burned rock. These were just below the overlying sand layer, Zone B. Zone B was composed of a series of lenses or layers of sand and silt with occasional layers of refuse. The bedding and soil content indicate that it represents a series of flood deposits. (In one place along the N 25 profile, I counted 28 different thin strata, which at the present rate of flooding of

the Red River, if each strata represents a flood, would indicate a considerable length of time.) In the beginning of the excavation the sand layer, Zone B, was divided into two levels, but later it was treated as a single level. In this report and in the National Museum catalogue it is referred to as Levels 3 and 4. Above the sands, Zone A, was dark sandy-clayish refuse overlain by humus. Level 1 included the humus and part of the refuse, but Level 2 consisted of only the refuse.

Besides the two hearths in Zone C (Pits 3 and 4) filled with river pebbles (perhaps used for roasting), four large pits intruded down from Zone A. One was in Square E 15 and was roughly conical in shape, being 2 feet in diameter at its mouth and about one foot deep. This pit (Pit 2) contained only a few artifacts and some bone. I believe this Pit 2 was a refuse or storage pit. Pit 1 was in Square N20E10 (*See Plate II*). It was roughly bell-shaped, being about 2 feet deep, about 3 feet in diameter at its mouth, 2½ feet in diameter at its neck, and having a maximum diameter of 4 feet 2 inches in its lower portion. Its bottom was almost flat. The lower portion of the pit was bark-lined and filled with dark clay, bone, a few artifacts, and occasional rocks. Just below the neck was a dish-shaped lens (with a maximum thickness of 3 inches) of ash and burned clay with a few fish bones and flint chips in it, as well as two thin sand lenses. Above this was a layer of dark refuse, and right at the neck was a lens of charcoal, bones, ash, and burned clay filled with burned and cracked river pebbles as well as two anvil stones, a polishing stone, and part of a full-grooved axe. Still higher up was a large quantity of artifacts in a layer of ash, refuse, and sand. The materials include parts of two whole pots (which probably were whole when they were put in the pit), a bone awl, a bone needle, part of a unilateral multi-barbed bone fish spear, shells (including one filled with red paint), burned birch bark, a flesher, a beaver tooth gouge, scrapers, and projectile points. This artifact layer, which was a pleasure to dig, was overlain by sand, burned clay, ash, and refuse.

I interpret the stratigraphy of Pit 1 as indicating that first it was used as a bark-lined storage pit for food, not unlike those used by the Cree and Saulteaux in the present day. Then the lower section of the pit became filled with refuse and was used as a hearth, which again was covered over with refuse. Next the pit was used as a roasting pit, fish and parts of animals being laid on hot rocks. Next, the pit again was used for storage, but this time implements and tools were stored. Finally, the pit served to hold a series of hearths and roasting areas. Furthermore, the various functions of Pit I, the sand lenses, and the continuity of its use would seem to indicate that the refuse (Zone A) associated with it was not just piled up by continuous occupation but represents re-use during a series of seasonal occupations.

Pit 5, 32 feet south of our main excavation, was also bell-shaped, being about 28 inches deep, having a basal diameter of about 2 feet, and being about 18 inches wide at its neck. It extended down from Zone B. In contrast to Pit I it seems to have been used only for storage and refuse disposal. There was a single pot, a bone scraper handle, and a projectile point in its bottom.

The burial pit uncovered by Vickers also extended down from Zone B and therefore is roughly of the same period as Pits 1, 2, and 5. It is interesting to note that various pits containing historic Cree burials, which have

eroded out of the Red River banks, are similar: they have tightly-flexed or bundled skeletons in oval pits with grave goods, and sometimes these are under slabs of limestone.

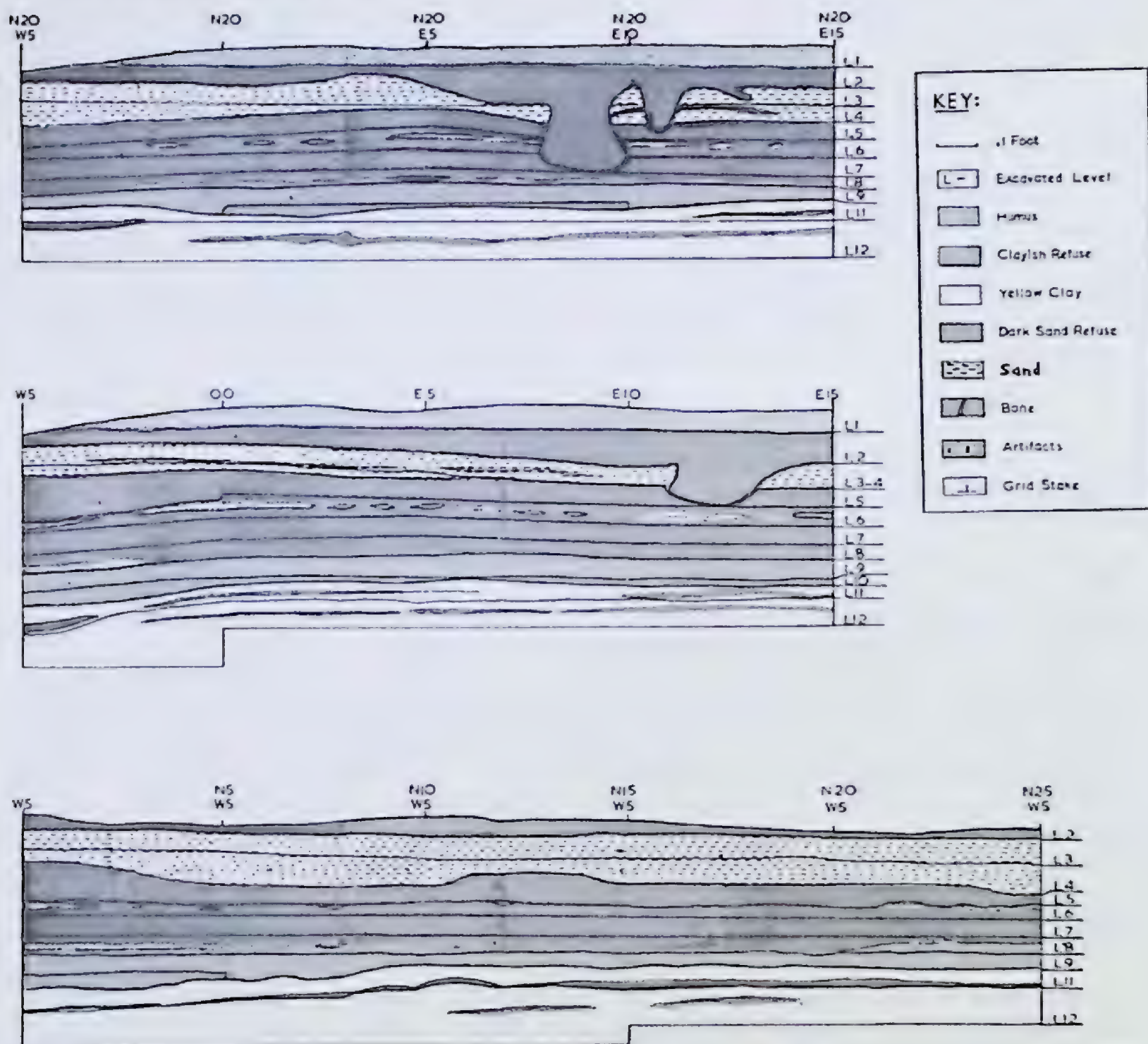


Figure 4. Cross-sections of Lockport Site.

Cultural Sequence

An analysis of the materials from the stratigraphic levels has revealed the remains of five sequential artifact complexes (here called foci). The earlier occupations are not represented by large samples, but comparison with materials from other sites or occupational layers of sites (called components) allow them to be classified into a number of archaeological cultures.

The earliest artifactual remains at Lockport come from Floor 1 of Zone H, Level 12. These materials are like those from Floor 2 of Zone G, Level 11. Bones from these two occupations are almost exclusively bison bones. The two projectile point fragments are both corner-notched. (One is an Anderson Corner-notched type.) One of these points has been

reworked into a scraper. Besides the projectile points there are seven biface fragments, one chopper, six flakes with retouching along their edges, three crude end-scrapers, one crude side-scraper, and one small prismatic end-scraper (as well as one from 7 feet below the surface found by Hlady in 1947) with a steep cutting edge and a ridged pointed base. Most of these artifacts as well as the chips are of a white heavily patinated chert that occurs in limestone beds near the mouth of the Red River. A few are of grey quartzite such as is found in the Precambrian Shield in northeastern Manitoba.

All these artifacts can be duplicated at the Larter Site, the type location of the focus of the same name. Moreover, the predominance of bison bones, the Anderson Corner-notched projectile point type, the corner-tanged point reworked into a scraper, the crude end-scrapers, the chopper, and the predominance of bifacial blades, all of which occurred in the earliest occupations of Lockport, are characteristic of the Larter site.

Following the Larter occupation were the materials of the Anderson Focus, found in Zone F (Levels 9 and 10 of the National Museum excavation). There was perhaps some lapse of time between the two occupations since the sterile yellow clay of Zone G separated the artifacts of the Larter Focus in Floor 2 from those of the Anderson Focus in Zone F. The bones of forest or aspen parkland animals, such as deer, hare, and wapiti, as well as molluscs, birds, and fish, outnumber those of bison. Coiled pottery with smooth surface and punched or dentate decoration occurs (belonging to the Lockport Plain, Laurel Dentate, and Lockport Linear types) as do a few sherds with cord-wrapped stick decoration (Lockport Corded). Projectile points are stemmed or notched (Lockport Stemmed and Anderson Corner-notched). A few of the scrapers are roughly oblong in outline with a snub-nosed cutting edge and neatly chipped dorsal surface. Flake knives or side-scrapers are still numerous as are bifacial blade fragments. One split beaver tooth and one blunted antler tool were also found.

The pottery complex described for Levels 9 and 10 of Lockport is almost identical to that found at the Anderson site, while the few stone tools from Anderson can be duplicated at these levels of Lockport.

Levels 7 and 8, i.e., Zone E, contained artifacts similar to those of the Anderson Focus but sufficiently distinct to justify separating them into another artifact complex. Furthermore, they are almost identical to those found in the middle levels of the Cemetery Point site. These are considered to be manifestations of a single cultural complex, the Nutimik Focus. Although most older pottery types are still present (Lockport Plain, Laurel Dentate, and Lockport Linear), there are a number of new varieties of this ware. These new varieties of pottery bear incising and/or rocker stamping (Cemetery Point Incised) or a series of horizontal bands of vertical impression (Nutimik Oblique). Furthermore, pottery decorated with cord-wrapped stick impressions and with cord-marked bodies (Lockport Corded) is now a rather important type. Also, a few sherds are painted red, and a few have crude net impressions on them. Projectile points are for darts or spears and much the same (Lockport Stemmed and Anderson Corner-notched) as in the previous horizon, but a large crude side-notched type (Whiteshell Side-notched) now occurs. Crude end-scrapers are absent, while triangular or oblong end-scrapers are fairly

numerous. Pointed beaver incisors, side-scrapers, and bifaces are still present. Bone awls represent a new addition. Regarding the peoples' diet, the animal bones uncovered reveal that an even larger part of their food came from forest animals such as deer, beaver, and elk. There is also a significant rise in the number of fish bones. Molluscs were still collected, and occasionally buffalo and birds were eaten.

The next occupation occurred in Zone C (Levels 5 and 6) and is considered to represent a component of the Manitoba Focus. Because of the radically different artifact types it is probable that there is a considerable temporal gap between this occupation and the preceding one. Perhaps the sterile sand layer (Zone D) was laid down during this interim. Animal bones show that mainly forest animals such as deer, hare, beaver, wolf, muskrat, and bear were eaten. Large amounts of fish bones were found, and though some fish may have been caught in nets, it is probable that the barbed bone points (found by Hlady in his Level 2) tipped fish spears. Bison bones are relatively sparsely represented. Bird bones show a significant increase in frequency. Small triangular arrow points with or without side-notches (Eastern Triangular, Prairie and Plains Side-notched) appear for the first time in this level. Biface fragments and flake side-scrapers, half-moon-shaped blades, and small end-scrapers of a number of varieties (prismatic, small disc, oblong and triangular in outline) make up the other chipped stone artifacts. Pebble hammerstones, anvil stones, arrow straighteners, full-grooved mauls and a bell-shaped pestle occurred. Finds by Hlady from Level 2 include a rib-bone handle, a fragment of split and worn deer femur (for fleshing), and a pierced bird leg-bone whistle. Bone awls and artificially abraded beaver teeth occurred in some profusion. Impressions on pottery show the use of two-strand cord and string. The pots are paddle-and-anvil-made and have cord-wrapped paddle-marked globular bodies (Manitoba Ware) and geometric designs on their thickened lips, rims, and vertical necks. These decorations were made by impressing a cord-wrapped stick onto the wet clay. Also, many clay pots bear a single band of evenly spaced circular punctates around their necks. The presence of a fair amount of Knife River flint from North Dakota and an obsidian chip from the Rockies suggests wide trade affiliations.

The final prehistoric occupation at Lockport is called the Selkirk Focus. In the sand and silt layers of Zone B (Levels 3 and 4) there was a series of layers of refuse that evidently represent brief occupations by a single group. Since Zone B represents water-laid layers, it seems these occupations were terminated by a series of floods, perhaps during a relatively recent wet climatic phase. Zone A (except for the humus) represents a still later occupation by the same group. Pits 1, 2, 5, and 6, and the burial pit excavated by Vickers, since they extend down from the same strata (and contain the same archæological materials), also are considered part of this component of the Selkirk Focus.

The dominant bones in this layer, both in number and weight, were fish bones. Bird bones were also very numerous. Mammal remains included beaver, deer, muskrat, moose, wapiti, bear, wolf, dog, and bison. Turtle bones, plum pits, and clam shells also were present. Food was stored in deep bell-shaped pits lined with grass or bark. These may have been dug with bison scapula hoes. Food seems to have been mainly

PLATE II. Lockport Soil Profiles.

1. N15 profile from east to west.
2. "O" profile from east to west.
3. N20 profile from east to west.



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roasted on hot rocks, though carbon adhering to the inside of pots suggests that some was boiled.

Large fish such as sturgeon (the bones of which were very numerous in Zone B) may have been speared on unilateral two-barbed antler or bone points, and others caught in gill nets (net-sinkers). Arrows seem to have been tipped mainly by small crudely-made side-notched points (Selkirk, Plains, and Prairie Side-notched), but a few triangular ones (Eastern Triangular) were used.

Other traits are large ovoid blades and side-scrapers, long bone-fleshers, full-grooved mauls, anvil stones, small round or triangular or oblong plano-convex end-scrapers, bone awls, a bone flesher, a bone needle, artificially-ground beaver teeth, and a bone celt. Impressions on clay show that both fabrics of woven babiche (raw-hide thongs) and string were used. One piece of burned birch bark with pierced holes for sewing suggests that birch-bark vessels and the like were in use.

A single fragment of a pipe of the Micmac type made from limestone and a single fragment of a cylindrical pipe of steatite were also found. The Micmac-type pipe, which came from the humus, has spiral incisions in the bowl. These were probably made by an iron implement obtained, directly or indirectly, from the White man.

Pottery was made with paddle and anvil, and the surfaces were covered with fabric impressions (Winnipeg River Ware). Decoration for the most part is absent, but sometimes there are cord-marked stick impressions on the lip and/or the rim.

A single shell filled with red ochre and a single piece of sewn geometrically-cut birch bark were uncovered in Pit 1.

Of the practices and beliefs concerning after-life we have but a single flexed burial with grave goods and a dog.

No architectural features occurred, but an oval area of refuse in the sand strata suggests that in the summer some sort of lean-to was used.

Six fragments of shell-tempered cord-marked pottery, like some found in southern Minnesota and Wisconsin, and four sherds with wide-line incising, such as is found on Cambria Type B sherds of southern Minnesota, are evidence of trade relations with those areas.

The charts in the Appendix present the frequencies of the various artifacts and food remains from this site. Also, for detailed descriptions of artifact types, see the Appendix.

THE CEMETERY POINT SITE

(EaKv - 1)

The Cemetery Point site is located at the mouth of the Whiteshell River on Lake Nutimik (See Figure 5). Specifically it is the southeast corner of the southeast quarter of Section 7 in Township 14, Range 14, east of the principal meridian. The site is situated along Lake Nutimik and is on a sandy ridge at the junction of the river and lake. It is about 15 feet above the level of the lake, while to the north it reaches an elevation

of about 30 feet above the lake, slightly over 910 feet above sea-level (See Figure 5 and Plate III). Since the exposed section of the site faces west, it would have been somewhat protected from the more wintry blasts, and the rich fishing resources of Lake Nutimik would have been available. Much of the site is covered by forest and brush, but waves from Lake Nutimik are cutting into one side of it. On the beach below the site, artifacts are fairly numerous while the bank reveals a cross-section of the site from north to south.

During a survey in 1953, the exposed section of the bank was studied. This reconnaissance revealed the ancient habitations to have been spread over an area 600 feet long, while subsequent testing showed it to have been 200 feet wide. A perusal of this natural cross-section also revealed that the area about 400 to 600 feet north of the mouth of the Whiteshell

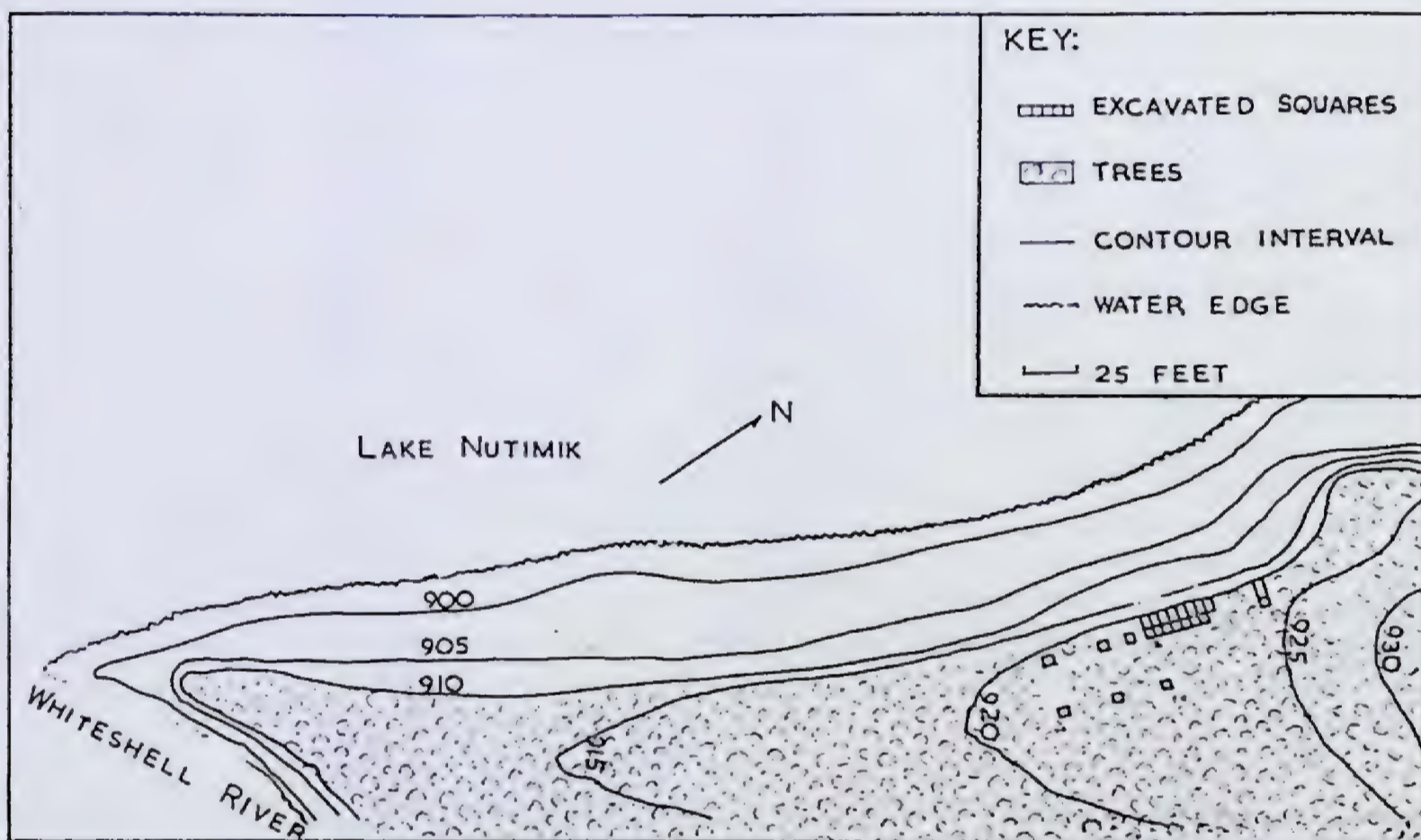


Figure 5. Map of Cemetery Point Site.

had refuse extending to a depth of 3 feet, and that there was a dark artifact-bearing stratum about 2 feet below the surface. Since there were possibilities of cultural stratigraphy in this region, we decided to test it.

In the preliminary testing, six 5-foot squares 30 feet apart were sunk along a line paralleling the bank. Also a similar group of four test squares was sunk 35 feet back from the bank, while later a single post hole was dug about 75 feet back from the bank. As far as numbering these squares was concerned, the same system employed at Lockport was used here with the southwesternmost square being S60W30 and the northwesternmost square being N85W30. These test holes were dug in arbitrary 6-inch levels.

A study of the profiles revealed that the refuse was deepest and the concentration of materials greatest in the two test squares, W30 and

N25W30. Therefore a trench 25 feet long was dug to connect these two 5-foot squares. Later this trench was enlarged to include square S5W30 as well as all the squares from S5W35 to N30W35. Since the various strata correlated pretty well with 6-inch levels, these squares were dug in arbitrary levels except for Level 3, which always went down to the top of Zone C, regardless of depth.

The stratigraphy was relatively simple (See Figure 6 and Plate III) with the whole site being overlaid by humus, called Zone A. Level 1 was dug from it. In the northeast section of the trench a shallow pit about 4 feet in diameter and a foot deep had been dug down from the humus by the aborigines. Under the 6-inch humus layer was a one-foot thick stratum of brown sand, called Zone B. The upper part of this zone had lenses of dark blackish sand as well as white sand. Level 2 came from this part of Zone B, while Level 3 came from the lower part, which was more homogeneous in colour. Three conical pits about 3 feet in diameter at their mouths and about one foot deep extended down from this zone. Under the brown sand was a dark stratum composed of sandy silt, called Zone C. It varied between 6 inches and a foot in thickness, and Levels 4 and 5 were taken from it. This overlaid a whitish brown layer, Zone D. Level 6 came from the junction of Zones C and D, while the stratum below 3 feet was devoid of human remains.

In terms of cultural stratigraphy, the earliest occupation was in Zone C (Levels 4, 5, 6). This occupation's artifacts are almost identical to those found by Vickers on the shore of Rock Lake and are considered to belong to a related focus, the Whiteshell Focus. Though bones were rare in this lower level, all but one found were of bison. The major traits are concave-based projectile points (McKean Lanceolate, Sturgeon Triangular, and Nutimik Concave types), one large unilateral multibarbed antler point, thick and thin side-scrapers, ovoid blades, some large crude fleshing scrapers, a few scrapers with stemmed bases, flake and large plano-convex end-scrapers, choppers, and a spoke shave. The stone tools are for the most part of quartzite or quartz from the Precambrian Shield, but a few flakes and artifacts are of white chert from along the Red River.

The second occupation in Level 3 is considered to belong to the Nutimik Focus, and its artifacts are like those found in Levels 7 and 8 of the Lockport site. Animal bones representing hunted game consist of beaver, deer, fox, and bear, and there are a few fish bones (not included in Table 8 because all were not identified).

Lithic traits include large corner-notched (Anderson Corner-notched) and side-notched (Whiteshell Side-notched) projectile points, oblong and triangular end-scrapers, usually with a dorsal ridge, ovoid bifaces, retouched flakes, and a single fragment of a polished stone adze.

Three crude prismatic flakes with retouching, possibly side-blades, were found. They probably were struck from a prepared polyhedral core. The large conical pits seem to have been used for storage, and one group of fire-cracked rocks may indicate that meat was roasted.

The most distinctive aspect of this focus is its ceramics. The pottery is all coil-made. Most of it is smoothed, but a small proportion has been carelessly paddled (perhaps to make it thinner) with some sort of object wrapped with a few strands of two-strand string. The vessels are coconut-shaped with upturned lips.

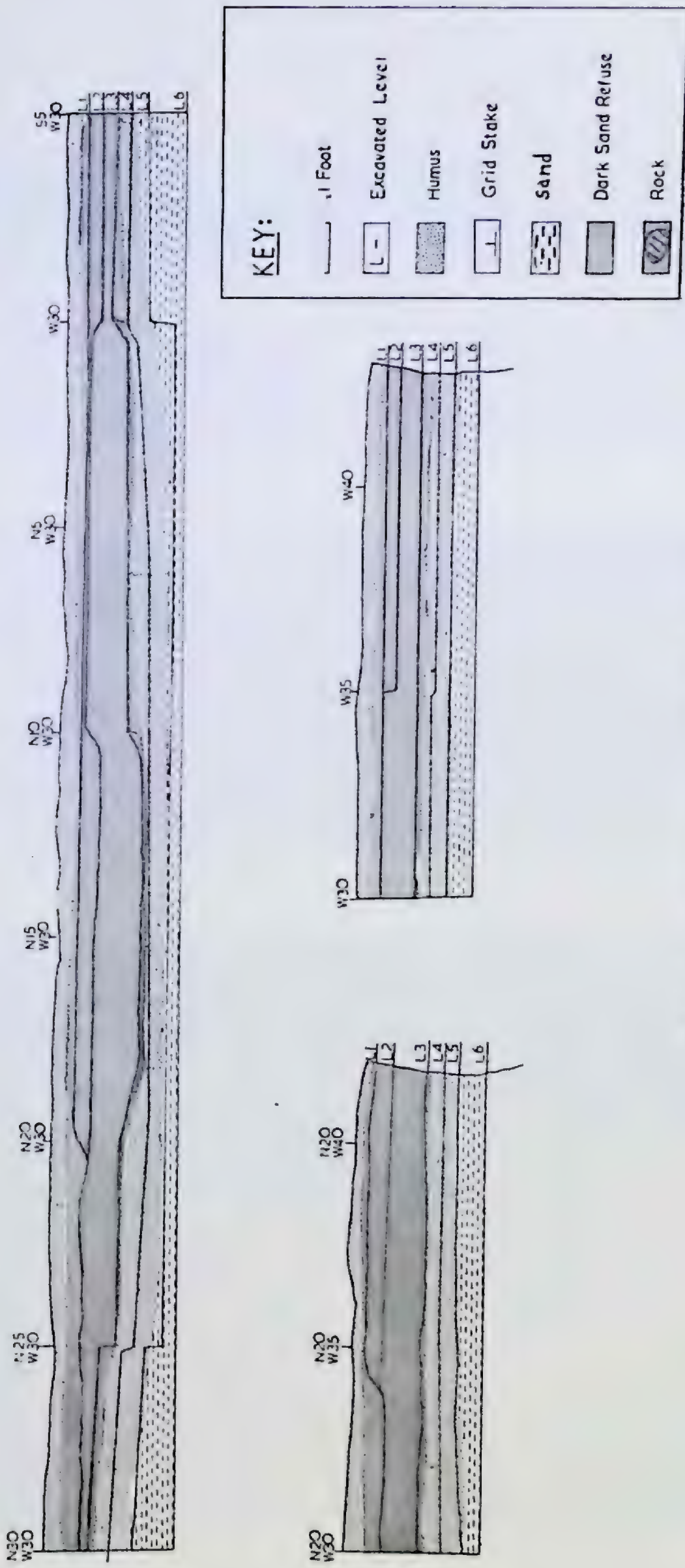


Figure 6. Cross-section of Cemetery Point Site.

PLATE III. Cemetery Point Excavations.

1. Looking southward across Nutimik Lake at the site.
2. Soil profile from S5W30 to N5W30, showing old humus.
3. W30 profile from W30 to N30W30.



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Like the Lockport component of this horizon, there is a considerable range of decorative techniques. One motif consists of incised parallel lines around the neck and upper body with rocker stamping on the lower body (Nutimik Incised). However, all sherds of this variety seem to come from one pot. Horizontal bands of oblique complex stamp impressions (Nutimik Oblique) from at least eight different pots comprise what is probably the dominant type. Pots with cord-wrapped stick designs (Lockport Corded type) that form horizontal lines on the neck and vertical (often rockered) designs on the upper two-thirds of the body are quite numerous. Only a few sherds have lines of dentate stamping and parallel lines of linear punches. Two sherds seem to have no decoration. All types, except those with oblique impressions, commonly have a single band of irregular punctations about one inch apart around the exterior of the neck.

Above the Nutimik occupation in Level 2 is a layer that is badly mixed and evidently represents more than one occupation. Materials like those in the occupations in Level 3 and Level 1 are intermingled with each other as well as artifact types not found in either of the aforementioned "pure" cultural levels. These few artifacts, distinctive of Level 2, are like those from Level 5 of Lockport and evidently represent an occupation by people of the Manitoba Focus, which we could not isolate in our excavation. Since this occupation could not be separated and since only a small proportion is represented, I believe it is best to pass on to the final pure occupation at this site without further ado.

The final occupation was uncovered in Level 1 (Zone A, the humus) and in the shallow pits extending down from Level 1. These materials are like those found in Levels 1 through 4 at Lockport, and the occupation is considered to be a component of the Selkirk Focus. Fish bones and animal bones (bear, wolf, deer, beaver, muskrat, and fox) appear in about equal amounts. Small triangular (Eastern Triangular) and side-notched (Prairie and Selkirk Side-notched) points occurred, with a slightly larger proportion of triangular points than was found at Lockport. Other stone objects were a notched pebble net-sinker; ovoid blades; half-moon-shaped blade; a catlinite pipe fragment; retouched flakes; small disc, oblong, prismatic, and triangular plano-convex end-scrapers; and one large ovoid object of mica schist. One piece of abraded shale may indicate that bone tools were ground into shape by the use of an abrader.

Pottery is predominantly babiche-impressed (Winnipeg River Ware) and otherwise much the same as that in Levels 1 to 4 at Lockport, except that more rim sherds have oblique cord-wrapped stick impressions (Sturgeon Fabric-impressed) on them, that a few have semi-lunar and circular punctates (Sturgeon Punctate), and that notched lip cord-marked sherds (Cemetery Point Corded) are in a higher proportion. Since cordmarking and cord-wrapped stick or paddle-edge impressions are traits of the Manitoba Focus, their presence at Cemetery Point indicates it is an early Selkirk Focus manifestation.

THE LARTER SITE

(EaLg - 1)

The Larter site is situated in the province of Manitoba, Selkirk County, St. Andrew's Parish, on Lots 10, 11, and 12, along the Red River, just east of the town of Parkdale (See Figure 2). The site is on land owned

by Joseph Larter and Miss A. Larter, who gave me permission to excavate and were most co-operative during excavation.

Archæological materials occurred mainly on top of the high terrace and adjacent sections of the low terrace (*See Figure 7 and Plate IV*). Testing in the low terrace revealed that there was no refuse below plough-level in six places; I believe the artifacts found on the low terrace have been carried from the high terrace by ploughing and erosion. The high terrace in the east part of the site is about one hundred yards east of the Red River, and the bank between the low and high terrace is poorly defined. Here the terrace runs roughly NNW. and SSE., and the site lies on the northernmost 400 feet of this section of the terrace. Gradually, however, the high terrace turns westward and ends up running ENE. to WSW. The site extends along this part of the terrace for about 800 feet west of the bend. Furthermore, as the terrace runs westward, it gets farther and farther away from the Red River, as the river bends only very slightly to the west. Thus the low terrace becomes wide, and the bank between the high and low terrace is very steep. Testing reveals that the site is in most places about 100 feet wide, being on the bank of the high terrace and its adjacent edge. Thus the site covers an L-shaped area 400 feet north-south and 800 feet east-west and is roughly 100 feet wide, thereby covering about 120,000 square feet. This archæological component covers a fairly large area, but unfortunately the refuse is nowhere over 2 feet in thickness and usually is considerably less.

From a geological standpoint, the top of the high terrace is evidently a deposit of Lake Agassiz fill that later was cut by the Red River. Still later the Red River laid a low terrace against the bank of the high terrace and is at present cutting its way through the low terrace. The low terrace, though higher than the one at Lockport, may be related to the latter, while the high terrace is definitely the same as the one at Lockport, both in content and construction.

In the digging of the site, the first problem was to find an area with some depth of undisturbed refuse and concentration of artifacts. Therefore a line of stakes, 100 feet apart, was set up on the northern 500 feet of the north-south part of the terrace and a second set for 1,000 feet along the east-west section of terrace. Four 5-foot squares were dug along the north line about 100 feet apart, and six were dug along the east-west section of the terrace (a field of wheat prevented me from sinking them exactly 100 feet apart). Then once this testing was done and the characteristics of the refuse determined, the area on both sides of the stakes and between the 5-foot squares was tested in eighteen different places with a post-hole digger. From this sampling technique, it was possible to determine that the area 400 feet south of the junction of east-west and north-south line of stakes was the best spot for extensive excavation, since the refuse extended to a depth of 29 inches, and bones, flint chips, and artifacts were numerous in our 5-foot test square.

After a one-foot contour map had been drawn and preliminary photographs of the area taken, an east-west area 15 by 25 feet was staked off into fifteen 5-foot squares with the test square being the southwesterly square of that area. Later a trench 5 by 10 feet was dug northward from the northeast corner of the main area, and a 5-foot square just south of the

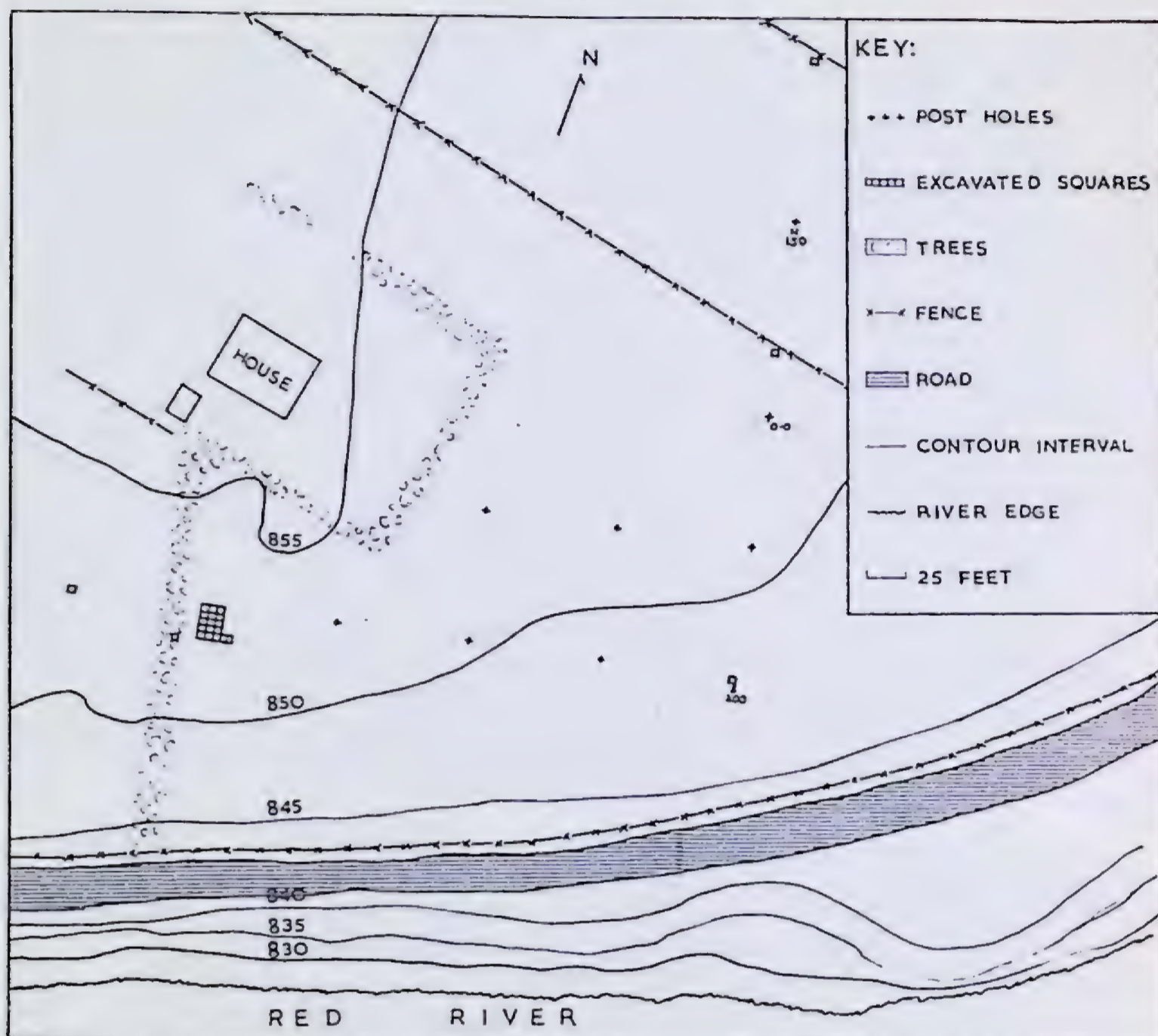


Figure 7. Map of Larter Site.

southeast corner was excavated. All squares were dug in arbitrary 6-inch levels except where features were encountered. Digging was mainly by vertical slicing with a mattock, since the grey clay was extremely hard and sticky. However, when artifacts or features were encountered, trowels and paint brushes were relied on. The alternate square technique was used in excavating the squares, and upon the completion of a square its profile was drawn. All features excavated by trowel were drawn and photographed.

Actually only three features were found. One was a small pit containing cracked and split buffalo bones that was intrusive from Level 2 in the southeasternmost square. Another feature was a lens of ash containing fire-cracked pebbles. This pit was evidently a roasting pit and part of Floor 1. Floor 1 was in the northeastern part of the trench. It was about 11 feet (north-south) long and 6 feet (east-west) wide (See Plate IV, Figure 8). This floor lay on top of the yellow clay at a depth of 1 foot 9 inches. In its north, south, and east extremities, it was separated from the grey clay refuse above it by a thin (1- to 2-inch) strata of yellow clay. However, along its western edge it gradually blended into the grey clay refuse. The floor itself was about one-half to one inch thick and dark grey in colour.

The surface of the floor was littered with a pavement of broken, split, and cracked bison bones. Intermingled with the bison bones were one semi-lunar knife, eleven projectile points (all but three being whole), parts of two large choppers, a huge scraper, and parts of a partially-grooved hammerstone.

I have interpreted Floor 1 as being an occupation level, on which the results of a buffalo kill were cut up for use. The actual slaughter probably took place elsewhere as no heads or vertebral fragments appeared. Apparently only those bones to which much meat adhered were brought to Floor 1. Carried in the flesh were some of the projectile points used in the kill. After the butchering was finished, evidently the area was left (possibly because of the stench), and after a time yellow soil was washed over the floor by rain and the like. Later occupation and dumping then took place in the same area.

Cultural Stratigraphy

Excavation of this site produced 489 artifacts, 217 of which came from the undisturbed deposit below the plough-level in the test trench (See Figure 8). For the most part the materials are homogeneous. However, in the plough-level small triangular (Eastern Triangular) and small side-notched (Prairie Side-notched) points, small triangular plano-convex and disc flat-topped end-scrapers, and three cordmarked sherds (Manitoba Corded Ware) were entirely different from either the other artifacts in the

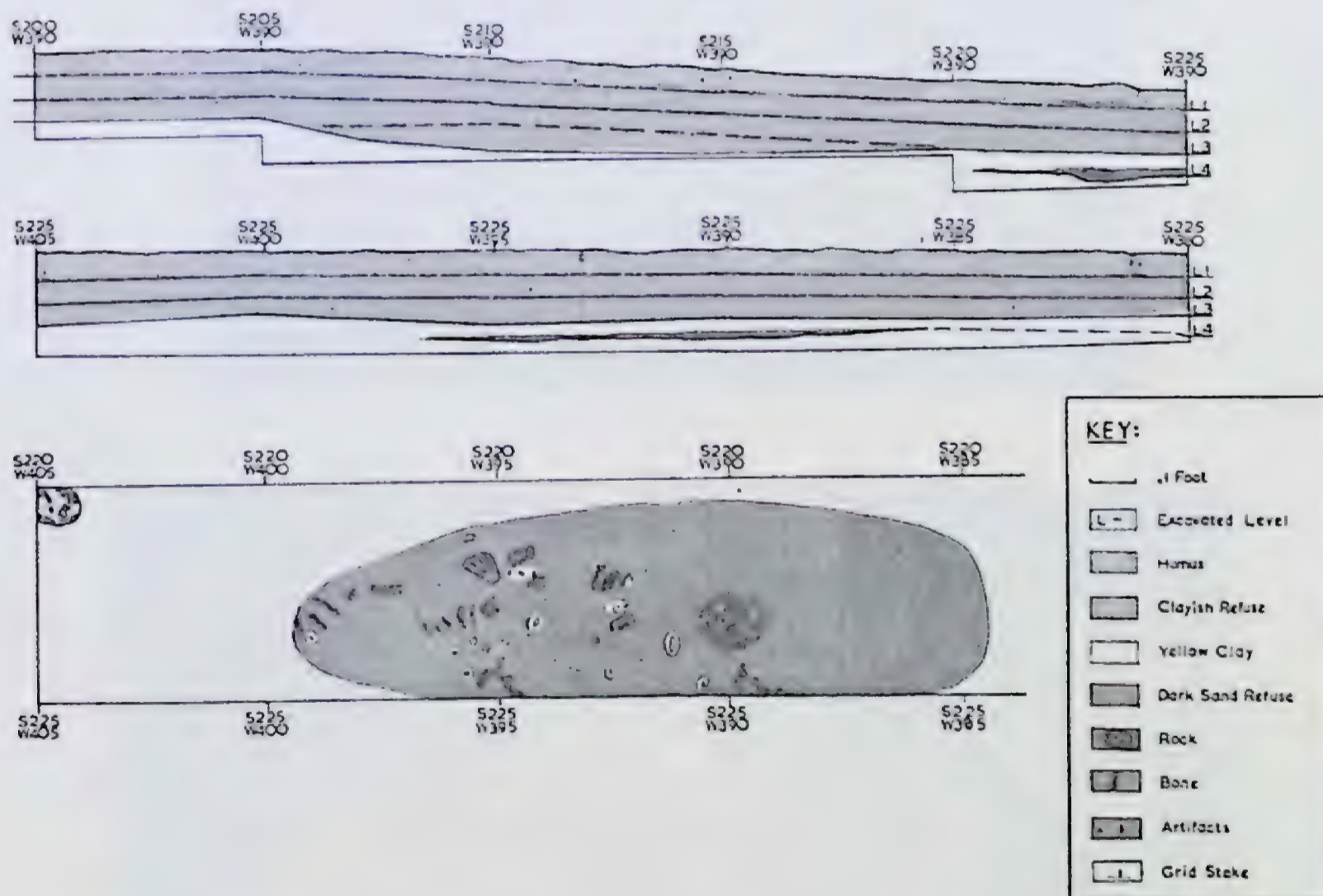


Figure 8. Cross-section of Larter Site and ground plan of Floor 1.

PLATE IV. The Larter Site.

1. Looking west from the Red River toward the Larter site.
2. Buffalo bones and artifacts on Floor 1 as seen from the north.
3. Floor 1, crushed buffalo bones and artifacts as seen from the north.



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plough-level or those from below it. Since all of these are to be found in the Manitoba Focus, it appears that there was a brief occupation of the site by people of that culture (even though we found no undisturbed deposits of it).

The majority of the artifacts appear to belong to one archæological culture, the Larter Focus. Those few artifacts from the lowest levels of Lockport are very similar and compose the second locus of this cultural complex. Comparisons were made between the artifacts from the various levels of Larter, and there is little evidence of cultural change during the occupancy. Therefore, in the following section describing the cultural complex, I shall treat the materials from all these four levels as a single cultural manifestation.

Found in the refuse along with the artifacts were numerous animal bones. Out of the 427 larger fragments of bone, 408 were fragments of *Bison bison* (though five or six teeth are extremely large for the species). There were four fragments of bird bone and fifteen fragments of animal bone other than buffalo. Two of these fifteen fragments were deer teeth, three were probably deer antler, one a bear tooth, and one the bone of a small animal (rodent?). Eight clam shells occurred. Thus, of the food remains 95 per cent were buffalo, 1 per cent bird, 2 per cent shell, and 2 per cent mammals other than buffalo. The implication from these data is that the Larter people were primarily (buffalo) hunters and probably nomadic or at least semi-nomadic. Furthermore, no evidence of food-gathering (in terms of grinding stones, pestles, or mullers) occurred.

Also, the present ecological environment of the Larter site is aspen-oak forest and in early times probably was the habitat of fair numbers of other animals besides the buffalo. Buffalo, however, were numerous in Early Historic time.¹⁷ The almost complete lack of bones of animals other than buffalo leads to two possible conclusions. One is that the Larter people preferred to hunt only buffalo. The second is that this region was plains and prairie at the time of the Larter occupation, and for this reason animals other than buffalo were rare or absent. The distribution of animals from the Lockport site levels tends to confirm the latter hypothesis.

For the chase, the Larter people tipped their spears or darts with a wide variety of types of projectile points, the most common being corner-notched points (Larter Tanged and Anderson Corner-notched), but side-notched (Parkdale-eared), fish-shaped (McKean Lanceolate), ovoid (Winnipeg Ovoid), and triangular (Sturgeon Triangular) were present. Not only do these projectile points (about 21 per cent of the total artifacts) indicate the great importance of hunting, but a comparison of the Larter forms with those of other foci indicates Larter's sequential position. The concave-based forms are like those of the Whiteshell Focus, and the corner-notched ones are similar to those of the Anderson cultural complex. This shows that the Larter Focus is intermediate in time between the two.

However, even more numerous than the projectile points are a series of types of tools for preparation of skins. Flake side-scrapers or skinning knives, pointed flake side-scrapers, and split-core side-scrapers are very prevalent. Other skin-working tools are plano-convex disc scrapers, split-core ovoid end-scrapers, large irregular plano-convex end-scrapers, flake

¹⁷ Roe, 1951.

end-scrapers, and notched end-scrapers (reworked projectile points). There are also some crude, pointed bifaced objects (borers) which may have been used to pierce the prepared hides.

Among the most common types of artifact found in excavation were bifacially chipped blades (or fragments thereof). In outline they are usually tear-drop shaped and range from $1\frac{1}{2}$ to 4 inches in length. A few of them are oblong, triangular, and circular in outline. Two are half-moon in outline and very long (3 to 5 inches).

Other stone artifacts are large cores with battering along their edges (choppers), a sinew stone, oval pebbles with pecking at their ends, and a single three-quarter grooved pebble. Most of the flint used in the artifacts is of local origin, but there are a few chunks of granite from the Precambrian Shield and a single chip of "Knife River Flint" from North Dakota.

THE ANDERSON SITE

(EbKw - 1)

Along the Pinewa channel a survey revealed three sites that appeared to be "pure" sites of three different pottery-bearing artifact complexes. The intended flooding of the area was an additional reason for excavating the sites.

The first of these, excavated in the autumn of 1951, was the Anderson site, in the southwest corner of Section 2, Twp. 16, R. 12, east of the main meridian (See Figure 2). It is situated on the east shore of the Pinewa Channel west of Pinewa Lake, and just east of the northernmost rapids of the channel. The site is on a low flat point extending westward into the channel (See Figure 9). Ten 5-foot squares were excavated to a depth of about 9 inches. There were three strata. The top stratum was humus about 4 inches deep (sometimes underlain by a thin streak of yellow silt). Level 1 came from this zone. The middle stratum was from 3 to 6 inches thick and was composed of dark clayish refuse. Level 2 came from this layer. No archæological features occurred in it, though there were two small areas with a high concentration of burned clay. The lowest layer was grey clay and was sterile of human remains. The whole middle level was excavated by trowel and then screened; the humus was removed by shovel and screened.

Almost all the human remains were found in Level 2 (except for 15 cord-marked sherds, Manitoba Corded (?) from the humus). Although most of the bones were not identified, the predominance of fish bones indicates that the site was primarily a fishing camp. Except for pottery, artifacts were scarce. Two corner-notched points (Anderson Corner-notched), two flake side-scrapers, one small end-scrapers, oblong in outline, and five ovoid blade fragments were the only lithic materials we uncovered. However, sherds were very numerous. All body sherds are smooth and coil-made, and appear to have belonged to coconut-shaped vessels (Laurel Plain Ware). The majority of decorated sherds have dentate stamp impressions on the upper half of their exterior surfaces (Laurel Dentate type). The motifs present are all-over horizontal lines, horizontal lines on the body with vertical or oblique lines on the rims, and horizontal or vertical bands of dentate impressions. All rim sherds show irregular punctates around the exterior of the neck. Almost as common were

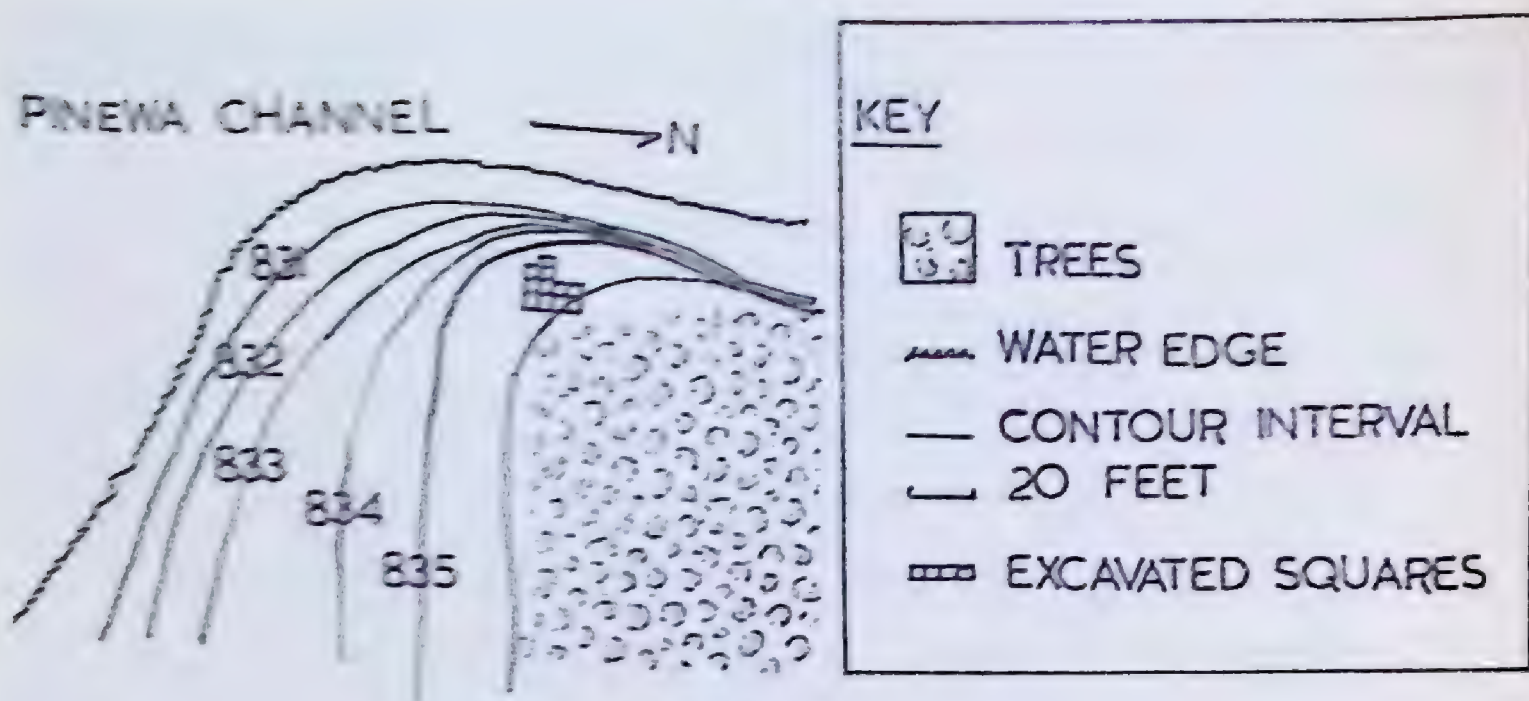


Figure 9. Map of Anderson Site.

sherds with linear punches (Lockport Linear). The linear punches on the bodies form horizontal lines, while those on the rim form oblique lines, and lip sherds show oblique punches on the interior of the lips. These sherds also have irregular punctates around the neck. Two sherds are undecorated except for irregular punctates around their necks. Two badly worn sherds seem to have cord-wrapped stick impressions on them in conjunction with irregular punctates on their necks.

Since all the artifact types, as well as the pottery types, are duplicated in Levels 9 to 10 at Lockport, it has been decided that both belong to the same cultural complex, the Anderson Focus.

THE TUOKKO SITE

(EbKw - 2)

Further north than the Anderson site along the Pinewa Channel is the Tuokko site (See Figure 2). The site is on a bank about 3 feet above the water-level and so close to the water's edge that waves were cutting into it (See Figure 10 and Plate V). From the surface collection and materials in the bank, it looked like a rich site. However, excavation of six 5-foot squares along the bank revealed that the top 6 inches of humus and 4 to 6 inches of underlying clay contained materials that had been washed in from farther up the bank, the only undisturbed cultural layer being a single one of white ash about a foot below the surface (See Plate V). Here materials were not numerous, and except for one flat-topped triangular end-scraper, only pottery occurred. The body sherds of this pottery are all cord-marked (Manitoba Ware), and rim and thickened lips bear cord-wrapped stick or paddle-edge impressions. Since the pottery is almost the same as that of Level 5 of Lockport and very similar to that in the Stott Village, I consider the ash layer of the Tuokko site to be a component of the Manitoba Focus. Except for contributing a well-isolated sample of sherds, it added little to our knowledge of that archaeological complex.

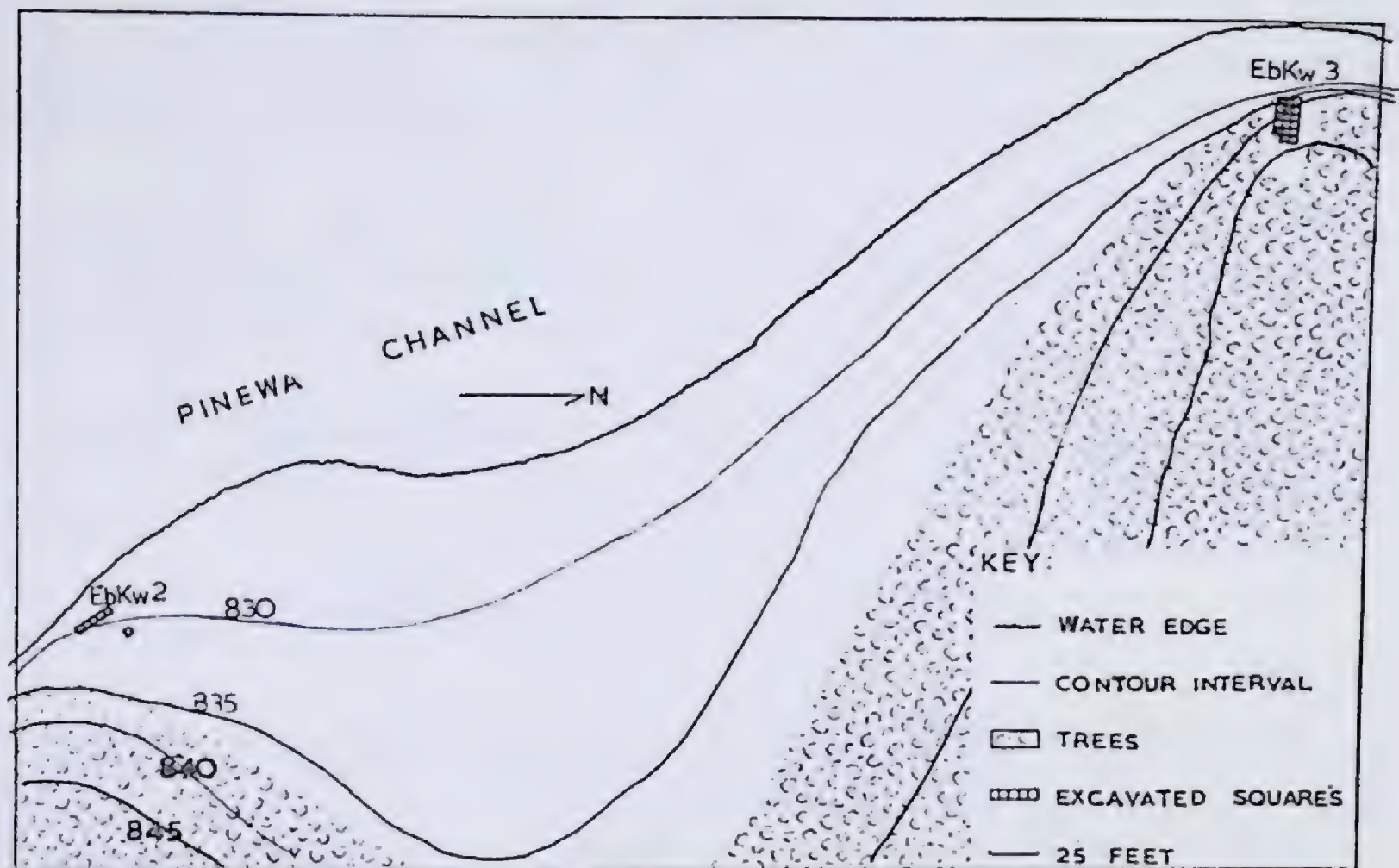


Figure 10. Tuokko and Waulkinen sites.

THE WAULKINEN SITE

(EbKw - 3)

About three-quarters of a mile north of the Anderson site along the Pinewa Channel is the Waulkinen site, Twp. 16, R. 12, southeast corner of Lot 35 (See Figure 2). The ancient habitation area is situated about 10 feet above water-level, on top of a steep bank (See Figure 10). I was first shown the site by Cecil Patterson, Forest Ranger at Lac Du Bonnet, in 1951 but did not excavate it until 1953. At that time fifteen 5-foot squares were excavated by trowel.

The artifacts appeared at the base of the humus, just above the underlying yellow clay. With the artifacts were two burned areas, one of which was filled with fire-cracked boulders. In this latter carbonized region, burned fish bones predominated. Elsewhere fish bones were the most numerous, but a few bird, deer, beaver, and wolf bones also occurred.

Crude small side-notched arrow-point types (Selkirk and Plains Side-notched) predominated, but a few triangular ones occurred (Eastern Triangular). Eight retouched flakes or fleshing knives were uncovered as well as twelve small end-scrapers. Most of the end-scrapers were small, plano-convex and circular in outline, but there were a few oblong and triangular flat-topped ones and one large ovoid skin abrader. Blade fragments were fairly numerous, and three pieces of slate with grinding along their edges were present, also a single beaver tooth with one end ground.

The pottery is much like that of the upper levels of the Lockport site in that it is predominantly fabric-impressed (Winnipeg River) and

undecorated, except for a few with notches on the lip. Four fabric-impressed rim sherds, however, do have oblique lines of cord-wrapped stick impressions (Sturgeon Falls Fabric-impressed), and a small percentage of body sherds are cord-marked (Manitoba Ware).

There were sixteen cord-marked shell-tempered sherds that probably came from Minnesota or Wisconsin and a single smooth sherd not unlike that found at the Lowton site in south-central Manitoba. Most of the flint material seemed to be of local origin, but there was one scraper of taconite from the Port Arthur, Ontario, region.

Since all the Waulkinen artifacts, and even the percentage of pottery types and motifs, are the same as found in the upper levels of Lockport, I believe we can consider this site to be a component of the Selkirk Focus.

THE STURGEON FALLS SITE

(EaKv - 2)

Across Lake Nutimik from the Cemetery Point site, the waves had eroded a 4-foot bank and exposed an archæological site (See Figure 2 and Plate V). This site was called the Sturgeon Falls site. In excavating the site in 1953, a trench 95 feet long and 5 feet wide was staked out parallel to the bank (See Figure 11). The archæological materials were right at the base of the humus in a 2- to 4-inch dark stratum overlying grey clay. In digging, the humus was stripped off by shovel and the dark area removed by trowel. In two areas about 2 feet in diameter, there were fire-cracked rocks in a charcoal-darkened area, and near the north end of the site there was a shallow pit (one foot deep) that was oval in outline (2.4 by 4.3 feet) and was filled with pottery and flecks of carbon and hammerstones (See Plate V).

In the excavations, bones were not numerous. A casual examination revealed they were mainly bird and fish bones, though moose, deer, muskrat, beaver, and bear bones occurred. The projectile points consist of three crudely-made side-notched (Selkirk Side-notched) and two fragments of triangular (Eastern Triangular) arrow points. Implements that could have been used for scraping, however, are much more numerous. Five side-scrapers or fleshing knives and sixteen end-scrapers were uncovered. Most of the end-scrapers are small, round in outline, and plano-convex in cross-section, but a few flat-topped oblong ones and larger triangular ones occurred. One large flat fragment of mica schist is chipped along its edge, and I believe served as a skin abrader.

Two pieces of flat slate show smoothing along their narrower edges and seem to be abrading tools of some kind. Fragments of two bone awls and two beaver-tooth gouges occurred as well as a single expanded-based flint drill. Four fragments of big ovoid blades, one anvil stone, and eight pebble hammerstones were uncovered.

The pottery of the site is predominantly (Winnipeg River) fabric-(babiche) impressed, and many of the rims are undecorated. This pottery, as well as the other artifacts, links the site with the upper levels of Lockport and Cemetery Point and the Waulkinen site, and allows it to be classified as a component of the Selkirk Focus. However, some of the pottery from Sturgeon Falls is different in that a large number of rim and body sherds

KEY:

~~~~~ LAKE EDGE

\_\_\_\_\_ CONTOUR INTERVAL

 TREES

 EXCAVATED SQUARES

— 25 FEET

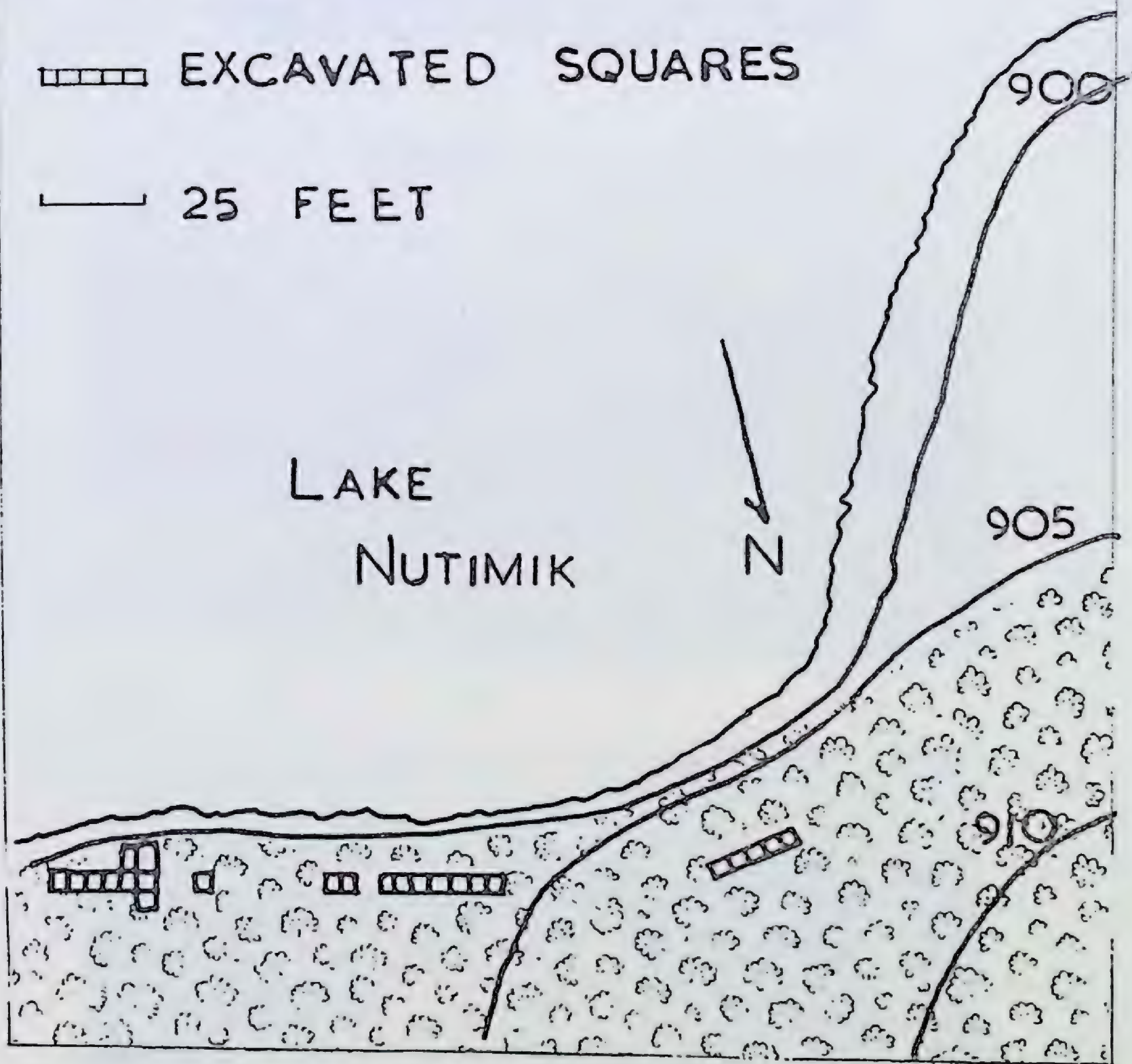


Figure 11. Map of Sturgeon Falls Site.

PLATE V. Sturgeon Falls and Tuokko Excavations.

1. Roasting pit area at Sturgeon Falls site.
2. Sturgeon Falls site as seen from south on Lake Nutimik.
3. Ash layer of the Tuokko site.





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are cord-marked (Cemetery Point Corded), some out-flaring rims (of Sturgeon Punctate) have semi-lunar punctates on them, and a fair proportion have cord-wrapped stick decoration (Sturgeon Fabric-impressed). Since the Manitoba Focus component (Level 5) is characterized by cord-marking and cord-wrapped stick decoration, and since it is under Selkirk Focus sherds at Lockport, I have concluded that this ceramic difference at Sturgeon Falls indicates that this component is somewhat earlier than the others we have discussed.

Two trade sherds, one with shell tempering and one with broad-line incising, indicate trade connections to the southeast of Manitoba.

## THE ALEXANDER'S POINT SITE

(EdLb - 1)

The site is on the Fort Alexander Reserve, Twp. 19, R. 9, at approximately  $50^{\circ} 36' 20''$  latitude and  $90^{\circ} 16' 20''$  longitude (See Figure 2). It is on the property of Joe Alexander, who willingly gave me permission to excavate and who had given his name to the point on which it is found. This point is on the north side of the Winnipeg River, across the river, and about  $1\frac{1}{2}$  miles upstream from the location of the former Hudson's Bay Trading Post, Fort Alexander. The site itself is located on a steep bank about 15 feet above the water (See Figure 12). In front of the bank is some debris which has rather recently eroded away, and the water in front of the point is very shallow for about one hundred yards out from the shore. Since artifacts occurred in both the shallow water and in the fill below the bank, I suspect the site was once much larger.

As my five days' work at the site occurred during the brisk weather at the end of October in 1951, excavations were carried on under adverse conditions. Labour consisted of only two willing but untrained assistants, and all equipment and labour were transported to and from the site across the Winnipeg River in a small narrow canoe.

A series of testings on top of the bank revealed that a large portion of the site had been ploughed and the refuse completely churned up. Right along the bank, however, a small undisturbed area was found. In this region a trench composed of six 5-foot squares was excavated by trowel.

In the trench, refuse was usually about 7 inches deep. In three squares the lower part of the refuse (5 to 9 inches from the surface) was separated from the refuse above by a thin (one-inch thick) layer of silt. In the analysis, materials from the surface (ploughed area) and top 2 inches of the excavation are considered to be the latest materials and called Level 1. The refuse from 2 to 5 inches in the excavation are considered to be Level 2, while the lower refuse below the silt layer is called Level 3. Just west of the excavation, along the bank, was a large bell-shaped pit that cut through the refuse. The materials dug from this intrusive pit belonged to Level 1.

Levels 1 and 2 included some Euro-Canadian materials, such as gun flints, nails, iron, and Staffordshire "iron stone" pottery, the latter having been made in England between 1845 and 1860. Whether the aboriginal materials are strictly contemporaneous with the European goods cannot be determined. Level 3, however, was sealed in by the sterile yellow silt layer,

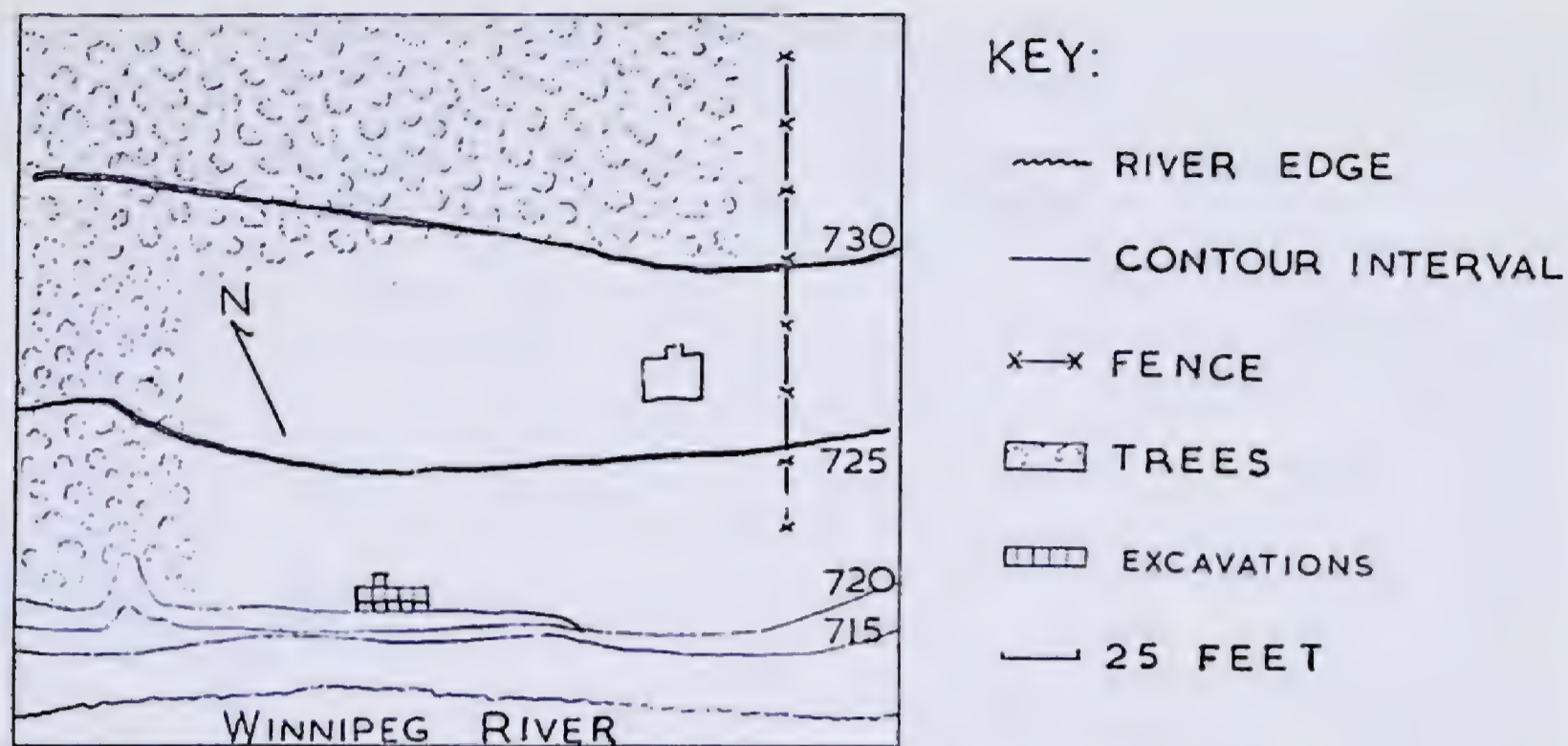


Figure 12. Map of Alexander's Point Site.

and therefore its materials were deposited in a single occupation by an aboriginal group.

The aboriginal materials from this layer, i.e., the fabric-impressed pottery; the fragments of small crudely-made notched and un-notched projectile points; the small, round, oblong, and triangular plano-convex end-scrapers; the side-scraper; the ovoid blade; the anvil stone; the pipe fragment; the large sandstone scraper; and a fragment of slate abrader, are identical to materials found in other components of the Selkirk Focus. However, the Alexander's Point component has artifacts that do not occur at the other components. This distinctive complex of artifacts include 15 hand-wrought iron nails, two brass fragments, a pierced piece of lead, a brass ring, and a pierced piece of brass with a nail in it (a hinge?). This is ample evidence that the Alexander's Point site was historic and that the Selkirk Focus extended to historic times.

The question now arises as to just what tribal group the Selkirk Focus represents. A number of lines of evidence may be brought to bear upon this problem.

The first kind of evidence is from the early French maps. To find exact locations from any of these is impossible, as geographical features are vague and indefinite, but general locations are well indicated. I examined seven French maps in Burpee's "La Vérendrye's Journal"<sup>18</sup> and a number of other 18th century maps in the Public Archives of Canada, and they do contribute one significant fact. No other tribe but the Cree is recorded in the 18th century for the north bank at the mouth of the Winnipeg River. Furthermore on one map (Map 6 of Burpee) at the mouth of the Winnipeg River on the north bank is written "Christeneau de la fort" (Cree of the fort).<sup>19</sup>

The second line of evidence comes from the journals and diaries of various early explorers. Jérémie, in the period of 1694-1714, writes that

<sup>18</sup> Burpee, 1927.

<sup>19</sup> Ibid.

"The country on the east side of the lake (Winnipeg) which runs nearly north and south, is a land of dense forests with many beaver and moose. Here the country of Cree commences."<sup>20</sup> La Vérendrye, based upon information from a Cree informant of 1730, states, "the whole right bank of the great [Winnipeg] River as you go down from the Lake of the Woods as far as Lake Winnipeg is held by the Cree."<sup>21</sup> In various other parts of this journal there are references to the Cree (and only the Cree) on the Winnipeg River between 1733-1741 culminating in the statement in the abridged memorandum to the map of 1749 that says at Fort Maurepas on the northeast bank at the mouth of the river (Winnipeg) "the tribe is the Cree of Bois fort."<sup>22</sup> Coquart in 1750 mentions that the Cree go to trade at the fort at the mouth of the Winnipeg River.<sup>23</sup> In Alexander Henry's diary, August 16, 1775, we find the following about his trip down the Winnipeg River, "We reached Lake Winipigon at entrance of which is a large village of Christenau" (Crees).<sup>24</sup> The final statement in the 18th century about the region and its inhabitants is made by Alexander MacKenzie and is evidently based upon his personal observations from 1789-1793. He wrote of the territory of the Cree that "It then proceeds till it strikes the middle part of the River Winipeg, following that water through Lake Winipic."<sup>25</sup> Thus the statements of all the important early explorers of the Winnipeg place the Alexander Point site in Cree territory, and three authors mention a large Cree village at the mouth of the Winnipeg River, which would be close to the Alexander's Point site, if not the site itself.

The third line is based upon the distribution of Selkirk Focus pottery (and inferentially the whole complex). The Winnipeg River Fabric-impressed type is found in at least four sites on the lower Winnipeg River, in the Whiteshell River at twelve sites, at three sites on the lower Red River, one site on the Berens River, one site on Lake Winnipigow, three or four sites near The Pas, two sites on the south end of Reindeer Lake, Saskatchewan, and one on Montreal Lake, Saskatchewan. This type, except for the odd sherd, is not found in the Rainy Lake and Lake of the Woods area, southern and southwestern Manitoba, or southern Saskatchewan areas. Thus, the Selkirk Focus pottery coincides very closely with the distribution of the Cree in the 18th and early 19th centuries.<sup>26</sup>

The artifacts and traits of the Selkirk Focus are the final evidence. Beaver-tooth gouges, grooved stone axes or mauls, bone needles, bibarbed unilateral fish spears, and a heavy Miemac-like type of pipe are diagnostic artifacts of the Selkirk Focus, and Skinner records these same types of implements as being used by the Cree.<sup>27</sup> The flexed burial that Vickers found at Lockport associated with Winnipeg River Fabric-impressed pottery corresponds to one type of Cree burial practice.<sup>28</sup> Also, the deer scapula implement that Vickers found with the burial at Lockport seems to be the same type of implement that Skinner heard about among the Cree.<sup>29</sup>

<sup>20</sup> Douglas and Wallace, 1926.

<sup>21</sup> Burpee, 1927, p. 59.

<sup>22</sup> Burpee, 1927, p. 484.

<sup>23</sup> Jenness, 1932.

<sup>24</sup> Alexander Henry, 1809, p. 246.

<sup>25</sup> Alexander MacKenzie, 1911, p. xcii.

<sup>26</sup> Skinner, 1912.

<sup>27</sup> *Ibid.*

<sup>28</sup> Alexander MacKenzie, 1911.

<sup>29</sup> Skinner, *op. cit.*

Finally, the deep bell-shaped bark-lined storage pits at Lockport and at Alexander's Point site, according to Cree informants at Fort Alexander, are still made by the Cree.<sup>30</sup>

In summary, the evidence that the Selkirk Focus represents the material culture of the Cree nation, or at least its western branch, is as follows:

1. The Selkirk Focus represents the material remains of the latest prehistoric group in the eastern Manitoba area (as evinced by its stratigraphic position at Lockport and Cemetery Point), which lasted into historic times (as may be seen by the European artifacts in association with the aboriginal ones at the Alexander's Point site).

2. Both the early historic maps and documents indicate that the historic Alexander's Point site (as well as the prehistoric Sturgeon Falls, Cemetery Point, and Waulkinen sites) is in territory that was occupied by no other group but the Cree.

3. Specific Cree villages (or a village) and a fort exclusively for the Cree are located by reliable observers (from 1700 to 1800 period) as being on the north bank of the Winnipeg River near or at Lake Winnipeg. The Alexander's Point site, of roughly that period, is located in such a position.

4. The fabric-impressed pottery diagnostic of the Selkirk Focus has about the same geographic distribution as the area occupied by the Cree.

5. A number of artifact types, the kind of storage pit, and the type of burial of the Selkirk Focus coincide with those recorded for the Cree by ethnologists.

### THE ROSSER MOUND

(DiLi - 1)

During the survey and excavation by the National Museum we were unable to find a mound in eastern Manitoba that had not been disturbed. Therefore, I am including in this report a description of the excavation of a mound dug by Mr. W. H. Rand, Mrs. P. H. Stokes, and Clifford Shaw for the Manitoba Museum. This mound was located just north of Rosser, Manitoba, and was dug on July 5 to 7, 1941.<sup>31</sup>

The upper levels of this mound, 60 feet in diameter and 4 feet high, were removed by a horse and scraper. This scraping revealed a log-covered area in the central portion about 3 feet below the surface. Beneath the logs were two cylindrical pits about 5 feet in diameter and 4 feet deep. The more centrally located pit contained a flexed (male?) burial in sitting position that had been sprinkled with red ochre. Associated with the burial was a single triangular arrow point (Eastern Triangular projectile point type), and a whistle made from a bird leg-bone. A few feet south of this pit was the other pit, which included two bundle burials sprinkled with red ochre. Grave goods in this pit were numerous and included: two mollusc shell spoons, one cylindrical columella bead, three bird-bone whistles, a triangular projectile point, two bone awls, two fragments of tubular stone pipes, a unilateral multi-barbed bone point, one flat-topped triangular end-scraper, and one half-moon-shaped chipped blade. During my examination of the mound I picked up four cord-marked sherds (Manitoba Cordmarked Ware) in the back fill.

<sup>30</sup> Joe Alexander, his wife, and their sons were my informants.

<sup>31</sup> Rand, 1941, pp. 8-10.

The triangular points, the flat-topped triangular end-scraper, the half-moon (side) blade, the unilateral multi-barbed bone points, the bird-bone whistle and the cord-marked pottery found in the mound are diagnostic traits of the Manitoba Focus. Thus the Rosser mound is considered to be a manifestation of that cultural complex. This conclusion agrees with those based on other studies of mounds excavated in south-central Manitoba.<sup>32</sup>

The Rosser mound shows that in this focus there were at least two modes for disposal of the dead. One method was to place the deceased, shortly after death, in a sitting position in a pit and to cover the pit with logs and earth. The other was to leave the dead in the open (perhaps on scaffolds) until the flesh was gone and then to gather (or bundle) up their bones and place them in a pit, which was covered with logs and earth. Both forms of burial were recorded by the early European explorers in Manitoba as being Assiniboine burial practices.<sup>33</sup> Thus mound burials are a link between the prehistoric and historic periods.

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<sup>32</sup> MacNeish, 1954.

<sup>33</sup> A. Henry, 1809.

### CHAPTER III

## HISTORICAL RECONSTRUCTION

### THE CULTURAL SEQUENCE

Two sites in southeastern Manitoba contained long stratigraphic sequences. These are the basis for the cultural chronology of the area. The Lockport site had the most complete sequence with five cultural complexes, one on top of the other; Cemetery Point had three.

The top levels of both sites (Levels 1 to 4 of Lockport and Level 1 of Cemetery Point) contained very similar artifacts. Particularly distinctive similarities of these two assemblages are the fabric-impressed pottery; small triangular and side-notched points; net-sinkers; slabs of slate with ground edges; small plano-convex disc, oblong and triangular end-scrapers; and large hoe-like scrapers, as well as such general traits as ovoid bifacial blades and flake side-scrapers. Each site, of course, had some distinctive artifact types. However, the materials in these uppermost levels of the two sites, because of their near identity, have been classified as being of one focus, the Selkirk.

Underneath the Selkirk Focus remains at Lockport, in Levels 5 and 6, were materials called the Manitoba Focus. The artifacts from Levels 7 and 8 were classified as another focus, the Nutimik. At Cemetery Point the Selkirk remains overlay a mixed layer, including Selkirk, Manitoba, and Nutimik artifact types. Underneath the mixed stratum was a pure layer of Nutimik Focus artifacts. Thus the Manitoba Focus with its distinctive artifact types, including Manitoba Corded Ware pottery, small triangular and side-notched points, flat-topped triangular and oblong end-scrapers, semi-lunar side blades, and beaver-tooth gouges, precedes the Selkirk Focus. Furthermore, the stratigraphy indicates that the Nutimik Focus with its distinctive Lockport and Laurel Ware pottery, its large side-notches and corner-notched projectile points, its keeled end-scrapers, and prismatic side-scrapers, precedes the Manitoba Focus.

In Levels 9 and 10 at Lockport, below the Nutimik artifacts, was a complex of tools including corner-notched and stemmed projectile points, Laurel Ware pottery, end-scrapers of oblong shape, and large ovoid blades. The materials compose the Anderson Focus and were over Larter Focus materials in Levels 11 and 12. The Larter Focus artifacts have as diagnostic traits large irregular plano-convex scrapers, side-notched scrapers, corner-notched points, and a series of crude ovoid blades. The stratigraphy of Cemetery Point was somewhat different in that the materials from Levels 4 to 6, under the Nutimik artifacts, were not Larter and Anderson but were of another complex, the Whiteshell Focus. As we shall demonstrate later, Whiteshell shows only continuity with Larter and not with the other foci and thus must be the earliest.

In conclusion, the stratigraphy indicates that the sequence of cultural complexes (from early to late) is as follows: Whiteshell Focus, Larter Focus, Anderson Focus, Nutimik Focus, Manitoba Focus, and Selkirk Focus (See Figure 13).

On the basis of this sequence it is possible to fit the various non-stratified sites into their proper chronological position. Since the Sturgeon Falls, Waulkinen, and Alexander's Point sites have the same kinds of materials as the upper levels of Cemetery Point and Lockport, it is concluded that all these belong to the latest aboriginal complex of the area, the Selkirk Focus. Alexander's Point has historic goods in it, and therefore it must be considered the latest of the five; while the Sturgeon Falls site with large amounts of cord-marked pottery seems just slightly earlier than the others.

The Rosser Mound and Tuokko site are components of the Manitoba Focus like Level 5 (and 6) of the Lockport site; these would precede the sites mentioned above. Levels 7 and 8 of Lockport and Level 3 of Cemetery Point represent a slightly earlier manifestation, the Nutimik Focus, while the Anderson site and Levels 9 and 10 of Lockport are the earliest pottery-bearing complexes of eastern Manitoba. The Larter site, since it is similar to the lowest levels (11 and 12) at Lockport, is, of course, still earlier, and the lowest level of Cemetery Point is the earliest complex so far found in this area. The following table indicates the sequence of components and the temporal correlation of the various sites or levels. I might add that this agrees with the seriations of the artifact types.

Table 1. Correlation of excavated levels and sites.

| Lockport Site            | Cemetery Point Site               | Tuokko Site                              | Individual sites                                 | Total Cultural Sequence |
|--------------------------|-----------------------------------|------------------------------------------|--------------------------------------------------|-------------------------|
| Levels 1-2<br>Levels 3-4 | Level 1                           | Level 1<br>Mixed<br>Alluvial<br>material | Alexander's Point<br>Waulkinen<br>Sturgeon Falls | Selkirk<br>Focus        |
| Level 5<br>Level 6       | Level 2<br>(Mixed levels 1, 2, 3) | Level 2                                  | Rosser Mound                                     | Manitoba<br>Focus       |
| Level 7<br>Level 8       | Level 3                           |                                          |                                                  | Nutimik<br>Focus        |
| Level 9<br>Level 10      |                                   |                                          | Anderson                                         | Anderson<br>Focus       |
| Level 11<br>Level 12     |                                   |                                          | Larter                                           | Larter<br>Focus         |
|                          | Level 4<br>Level 5<br>Level 6     |                                          |                                                  | Whiteshell<br>Focus     |

At least two parts of this long sequence may be correlated with strata reflecting climatic phenomena and, possibly, geological periods. Perhaps eventually they may be given absolute dates.



Zone B of Lockport is composed of a series of fine silt and sand layers. A microscopic examination of the grains of sand and silt reveals that they have well-rounded edges. Therefore these silt and sand layers were water-deposited. This is a unique deposit at Lockport in that, while occasional water-deposited lenses occurred in other parts of the excavation, nowhere were there so many lenses, nor were the total water-deposits so thick. Each single lens of Zone B could be traced on the profile as extending over all the excavated areas. Rarely there was a little refuse, charcoal, and a few artifacts on top of a lens, but nowhere had a humus occurred between the deposition of one layer and the next. The most likely explanation of these lenses is that each one represents a flood deposit, and that Zone B represents a long series of floodings that occurred in relatively rapid succession. Though there are a number of factors that could have caused these floodings at Lockport, I have assumed that they were due in large part to a number of successive wet years, i.e., a wet period.

Fortunately dendrochronological studies have been undertaken in the adjacent region of North Dakota and South Dakota which record climatic conditions back to about A.D. 1000. I believe it is valid to assume that the tree-ring charts for this region are applicable to Manitoba. A study of the graphs of the tree-ring charts reveals that there were two relatively wet periods in late prehistoric times (1576-1596 and the last half of the 14th century) and one in protohistoric times (1663-1702).<sup>34</sup> Since one would expect cultural complexes to include historic goods in protohistoric times and since Zone B and Zone A lack them at Lockport, a 1663-1702 date for Zone B is highly improbable. Both the 1350 to 1400 and 1576 to 1596 dates are possible for Zone B. I am inclined to favour the earlier of the two. First, since Zone B has in some places more than 20 strata representing annual flooding, the length of the more recent prehistoric wet period seems too short. Secondly, since Zone B contains Selkirk Focus materials and since we uncovered a considerable amount of prehistoric Selkirk Focus remains revealing some cultural change, the period from 1576 to historic times does not seem long enough. Thirdly, the accumulation of Zone A (without historic goods) above Zone B would seem to have taken a longer time than 134 years.

Thus, very tentatively it has been concluded that the Selkirk Focus (the remains of the Cree) made its appearance in southeastern Manitoba between A.D. 1350 and 1400 and that the Manitoba Focus (the ancestral Assiniboine cultural complex) was no longer in that area by A.D. 1350. I hope this hypothetical dating can be checked by Carbon 14 analysis.

The other archæological material that may be correlated with climatic or geological periods occurs in the lowest levels of the Lockport site (Zones G and I) and belongs to the Larter Focus. The materials are in yellow clay that overlays boulders and limestone, as well as under a thinner deposit of yellow clay about 5 feet below the surface of the lower terrace at Lockport. These Larter materials appear to have been deposited during the early stages of the formation of that low terrace. The question now arises as to when the low terrace of the Red River was formed. Geological estimate would place it in the interval between 2,000 to 4,000 years ago.<sup>35</sup>

<sup>34</sup> Schulman, 1953, p. 216, Fig. 6.

<sup>35</sup> Elson, 1955.

A tentative Carbon 14 date (C723) of a log in the lower part of the low terrace of the Red River near Robbin, Minnesota (quite similar in stratigraphic position to the Larter remains at Lockport), gave a date of  $2684 \pm 200$  years ago.<sup>36</sup> This more or less agrees with the geological estimate.

Supplementing the geological evidence are dates derived from similar dated sites from a wider area. In the Great Plains and prairies there are a number of sites that have an artifact complex not unlike Larter. All of them have McKean Lanceolate points in association with corner-notched types (either Larter Tanged, Anderson Corner-notched, or Hanna points). Along with these points are more general traits such as choppers, end- and side-scrapers, large bifacial blades, and spoke shaves. Many of these sites have been dated by Carbon 14. These include Signal Butte I in Nebraska, dated as  $3445 \pm 120$  and  $2950 \pm 200$ ,<sup>37</sup> the Pelican Lake levels from the Mortlach site in Saskatchewan dated as 2750,<sup>38</sup> the lower levels of a site (numbered 48CK204) from the Keyhole Reservoir in Wyoming dated as  $2790 \pm 350$ , the upper levels of the McKean site (numbered 48CK7) in Wyoming, dated as  $3287 \pm 600$ , and three other nearby sites, Muddy Creek (numbered 48FR34), Upper Muddy Creek, (numbered 48FR33), and Poison Creek, (numbered 48FR5), which have been dated as  $3540 \pm 220$ ,  $3350 \pm 250$ , and  $3560 \pm 220$ , respectively.<sup>39</sup> Thus a general Larter-like complex extending widely over the plains and prairies yields a series of dates that agree with the geological dates for the Larter Focus and are the basis for considering this focus to fall between 2,500 and 3,500 years ago.

Many of these Larter-like sites are underlain by an earlier complex like the Whiteshell Focus, which has only McKean Lanceolate points and lacks the corner-notched types.<sup>40</sup> These, of course, must be older than 3,500 years. Two horizons with this sort of complex from the Angostura Basin of South Dakota have been dated by Carbon 14 as 4230 and 3630<sup>41</sup>. On the bases of these dates, I estimate that the Whiteshell complex, having predominantly McKean Lanceolate points and no corner-notched ones, falls in the time period from 3,500 to 5,000 years ago.

The Anderson and Nutimik foci, on the basis of their dentate stamp, rocker stamp, and cord-wrapped stick (often rockered) pottery, and corner-notched points, seem to be of the same general time period as the Hopewellian manifestation in the midwestern United States. Three Ohio Hopewell dates by the Carbon 14 method are  $1951 \pm 200$ ,  $2285 \pm 210$ , and  $2044 \pm 250$  years old, while an Illinois Hopewell date is  $2336 \pm 250$  years ago.<sup>42</sup> In Saskatchewan the Besant culture with a projectile point series very much like that of the Nutimik Focus has been dated as  $1580 \pm 325$ . Since the Anderson and Nutimik foci of Manitoba are connected with the Hopewell Focus in the United States Midwest on the basis of pottery and with the Besant Focus in Saskatchewan on the basis of projectile points, an estimate of 1,000 to 2,500 years old for the Middle Woodland Foci does not seem unreasonable.<sup>43</sup>

<sup>36</sup> Libby, 1955.

<sup>37</sup> Kulp, 1952—No. L104A and L104B.

<sup>38</sup> Wettlaufer, 1956, p. 81.

<sup>39</sup> Libby, 1955—C668, C715, C702, C711, and C712.

<sup>40</sup> Mulloy, 1954; Wettlaufer, 1956.

<sup>41</sup> Dr. J. B. Griffin, pers. comm.—M369 and M368.

<sup>42</sup> Libby, 1955, C136, C137, C139, and C152.

<sup>43</sup> Wettlaufer, 1956, p. 81.

Thus the stratigraphic sequence of southeastern Manitoba has been tentatively dated as follows:

|                       |                   |
|-----------------------|-------------------|
| Selkirk Focus.....    | A.D. 1350-1750    |
| Manitoba Focus.....   | A.D. 1000-1350    |
| Nutimik Focus.....    | A.D. 500-1000     |
| Anderson Focus.....   | 500 B.C.-A.D. 500 |
| Larter Focus.....     | 1500-500 B.C.     |
| Whiteshell Focus..... | 3000-1500 B.C.    |

## A RECONSTRUCTION OF THE CULTURAL COMPLEXES OF SOUTHEASTERN MANITOBA

In the following section the sequential archæological foci of southeastern Manitoba are described. This is a reconstruction of the known prehistory of that area. It will not include specific descriptions of artifacts or artifact types; these are presented in the Appendix. Also, the cultural relationships of the archæological complexes will be only briefly mentioned as they are discussed in the final section of the report.

### *The Whiteshell Focus*

The only manifestation of this cultural complex occurred in the lowest levels (4 to 6) of the Cemetery Point site in the Whiteshell region of eastern Manitoba. Stratigraphically it represents the earliest remains of man in this region. Cross-dating tentatively puts this focus at 3,500 to 5,000 years old.

The site is situated on ancient beach sands above the shore of Lake Nutimik in the forested region of eastern Manitoba. Since almost all the bone associated with the archæological material was that of plains buffalo and almost no remains of forest animals occurred, it has been suggested that this region was perhaps a grassland at the time of this early occupation.<sup>44</sup> The area covered by the refuse of Whiteshell Focus remains was small. The thinness of the refuse suggests a nomadic camp-site.

Most of the evidence of this people's subsistence activities—the buffalo bones<sup>45</sup> in conjunction with projectile points, and a number of tools for the scraping of skins—points to large-game hunting. We have, however, one barbed antler point<sup>46</sup> that may have been used to spear fish. This, as well as the location of the site along a waterway at present abundant in fish, suggests that some fishing was done.

One of the most important activities of this group was flint knapping. Material used in chipping, for the most part, was chert, quartz, or quartzite from the general area of the site, but a few chips and tools were made from a grey chalk chert that outcrops along the Red River just above its delta. Blades or projectile points were first chipped from quarry blanks or large flakes by percussion flaking. Then they were rounded into their various shapes, and their edges finished by pressure flaking.<sup>47</sup> Scrapers seem to

<sup>44</sup> See appendix p. 178.

<sup>45</sup> See appendix p. 177.

<sup>46</sup> See appendix p. 129 and Plate XII.

<sup>47</sup> See appendix p. 117.

have been made mostly by pressure flaking along one or more edges of a large flake, flat on one side.<sup>48</sup>

The projectile points are all lanceolate-shaped with concave bases and are fairly narrow.<sup>49</sup> Some of them have been ground along their lateral edges near the base. These are narrow points with deep concave bases, and the grinding of the lateral edge makes it appear that they have an incipient stem. The range of size of projectile points suggests that they were mainly dart or spear points,<sup>50</sup> but a few might have been arrow points.

The large ovoid blades may have been hafted onto some sort of handle for use as daggers or knives.<sup>51</sup>

The thin and thick flakes with retouching along one length are often called side-scrapers.<sup>52</sup> Actually they could just as well serve as some sort of all-purpose cutting implements or skinning knives. None of them have any provision for hafting. One single flake with a retouched convex edge, called a "spoke shave" in archæological terminology, may have been used for scraping skins and bone, as well as for cutting or shaving wood.<sup>53</sup>

Three kinds of implements were probably used for skinning or scraping hides. One of these types of implements is circular to oval in outline, plano-convex in cross-section, and relatively large (1½ to 2½ inches long).<sup>54</sup> The dorsal side usually bears percussion flaking, with finer retouching along part of the dorsal edge. Because of the convex side, these objects would be most difficult to haft and may have been used as some sort of scraping plane. On another type the dorsal side usually bears percussion flaking, with finer retouching along ventral surface. The dorsal surface has relatively steep sides leading to a flat top and has steep retouching on one of the ends.<sup>55</sup> These end-scrapers could have been hafted and probably were, the narrow end opposite the retouched end being inserted in some sort of wood or bone handle. The final scraper type seems either to have been made from projectile points that had thin tips reworked by bifacial chipping to form convex scraping edges or to have been merely reworked broken projectile points.<sup>56</sup> Since their bases are convex and the basal edges ground for dart shafts, they could have been hafted easily on some sort of split stick or notched bone. One unifacial chipped pointed object may have functioned as a drill or skin-piercer.

The multi-barbed unilateral antler point yields considerable information about these ancient peoples.<sup>57</sup> First of all it was cut from a piece of antler, probably moose, and is the only osteological material that is not from a buffalo. While some of the edges are ground, most of its flat surfaces have been scraped, perhaps with one of the end-scrapers. It has a long tapering point, and its five barbs on one edge are oblique in front and back, and flat on top. Such a barb could have been used only on a spear, not a leister. The base of the point is thinned and has a line hole in it. This

<sup>48</sup> See appendix p. 105.

<sup>49</sup> See appendix p. 92 and Plate VI.

<sup>50</sup> See appendix p. 92.

<sup>51</sup> See appendix p. 117.

<sup>52</sup> See appendix p. 105 and Plate VIII, Nos. 1, 2, 3, 10.

<sup>53</sup> See appendix p. 106 and Plate VIII, No. 11.

<sup>54</sup> See appendix p. 109 and Plate VIII, No. 6.

<sup>55</sup> See appendix p. 109 and Plate VIII, Nos. 4, 5.

<sup>56</sup> See appendix p. 109 and Plate VIII, Nos. 8, 9.

<sup>57</sup> See appendix p. 129 and Plate XII, No. 5.

suggests that the point was detachable from the shaft and was fitted into some sort of socket or groove at the end of the shaft. The hole indicates that a line was attached to the head by which the spearer could draw in the fish once he had thrust it in and the shaft had become detached. The size of the point, 9 inches long and with a maximum width of  $1\frac{1}{4}$  inches, suggests that it was used for spearing only large fish such as sturgeon. The line hole in the antler point gives one more interesting fact. The hole has been drilled from two sides, so we may conclude that the people of the Whiteshell Focus used some sort of hand drill (in contrast to a bow drill).

### *The Larter Focus*

Components of the Larter Focus were unearthed at the Larter site<sup>58</sup> and in Level 11 (Zone G) and Level 12 (Zone H) of the Lockport site.<sup>59</sup> The two last-named occupations are situated in the lower part of the low terrace next to the Red River (at that time probably the beach), and the Larter site is on a high terrace, which at the time of its occupancy may have been the only terrace of the Red River.

The dating of the low terrace by Carbon 14 and the cross-dating of the Larter type of material suggest that these people lived in eastern Manitoba 2,500 to 3,500 years ago.<sup>60</sup> Though this area is now covered by aspen parkland, the presence of mainly buffalo bones in all three components indicates that it was probably a grassland during Larter times.<sup>61</sup>

The thin occupational stratum covering a limited area at Lockport (Floors 1 and 2) and in the lower levels of Larter (Floor 1) suggests a short occupancy by a small group—some sort of small nomadic band. However, the rather deep refuse at Larter and the large size of the site seems to imply either that occasionally there was a large gathering of smaller bands, or that small bands repeatedly returned to this site over a considerable length of time. Perhaps it was a little of both.

On the basis of the large number of buffalo bones, projectile points, and scrapers, we may assume that the subsistence of the Larter peoples was based primarily on hunting. The few fish bones from Level 11 of Lockport indicate that fishing was of minor importance.<sup>62</sup> These may have been caught in dip nets or weirs. Some meat was roasted on hot rocks placed on embers.<sup>63</sup> The large number of cracked bones, some with the interior section cleaned out, reveals that the marrow was relished. The grooved and ungrooved hammerstones and choppers may have been used to crack these bones, and some of the scrapers may have served to gouge out the marrow.<sup>64</sup>

As with their predecessors in the area, flint knapping was an important industry. The dominant material utilized was a grey chalky chert that outcrops along the Red River, but a few pieces of quartz, quartzite, and bluish-black granite from the Precambrian Shield were also used. The occurrence of rough nodules and large bifacial ovoid or semi-lunar quarry

<sup>58</sup> See page 32.

<sup>59</sup> See page 22.

<sup>60</sup> See page 54.

<sup>61</sup> See appendix p. 175.

<sup>62</sup> Ibid.

<sup>63</sup> See page 34.

<sup>64</sup> See appendix pp. 122, 123.

blanks shows that some of the raw material was brought to the site and then fashioned into tools. The technique of manufacture seems to have been much the same as that of the Whiteshell peoples.

Projectile points are of a size that had to be used mainly on spears or darts, but a few are small enough to have been arrow points. Though a few are lanceolate, like those of previous horizons,<sup>65</sup> and many are large triangular<sup>66</sup> or ovoid,<sup>67</sup> a large number have corner-notches,<sup>68</sup> and four have side notches,<sup>69</sup> indicating probably a different method of attaching the points to the shafts. The fact that they represent 25 per cent of the total artifacts emphasizes the importance of hunting.

However, the dominant (47 per cent) artifacts of this horizon are scrapers, an indication that leather-working was a very important industry. Of course some of these scrapers could have been used to gouge out marrow, to shave wood, and to abrade bone. Many of the scrapers are large and crude and most difficult to haft. Some of these are split cores oblong in outline with dorsal retouching along either their longer or shorter side;<sup>70</sup> others are circular in outline with retouching all around their dorsal edges. There are three varieties of end-scrapers that could have had some sort of handle. Some of these are oval in outline and plano-convex in cross-section and are retouched along one of their shorter ends,<sup>71</sup> while the others are merely long flakes with retouching along a shorter end.<sup>72</sup> Three end-scrapers are notched<sup>73</sup> and could have been hafted to some sort of split or notched handle.

One fragment of a point, one triangular point with a very narrow tip,<sup>74</sup> and some of the pointed side-scrapers<sup>75</sup> may have been used to gouge holes in skins, bones, wood, and the like.

Flat flakes with retouching along one of their narrow sides were possibly all-purpose cutting tools and might have been used as scrapers.<sup>76</sup> However, bifacially-chipped blades seem to be the most numerous kind of tools used for cutting. The most numerous are tear-drop shaped.<sup>77</sup> These and large triangular ones<sup>78</sup> may have been end-hafted. Two half-moon-shaped ones<sup>79</sup> occurred; they may have been hafted into the side of some sort of handle and their convex edge used for cutting. Also, bifacially chipped blades that are round or oval occurred. Exactly how they were hafted (if they were) is difficult to comprehend.

A few large, roughly oval-shaped blades, which have battering along one of their edges, occurred.<sup>80</sup> These may have been choppers. Three cobbles with pecking on one of their ends and one pebble with a pecked groove

<sup>65</sup> See appendix p. 98 and Plate VI, Nos. 18-20.

<sup>66</sup> See appendix pp. 93, 98 and Plate VI, Nos. 14-17.

<sup>67</sup> See appendix p. 99 and Plate VI, Nos. 12, 13.

<sup>68</sup> See appendix pp. 100-101 and Plate VI, Nos. 1, 2, 9-11.

<sup>69</sup> See appendix p. 100 and Plate VI, Nos. 6-8.

<sup>70</sup> See appendix pp. 106-109 and Plate VIII, Nos. 6, 10.

<sup>71</sup> See appendix p. 109 and Plate IX, Nos. 2, 3.

<sup>72</sup> See appendix p. 109 and Plate VIII, Nos. 4, 5.

<sup>73</sup> See appendix p. 109 and Plate VIII, Nos. 7-9.

<sup>74</sup> See appendix p. 122 and Plate X, No. 8.

<sup>75</sup> See appendix p. 110.

<sup>76</sup> See appendix p. 110.

<sup>77</sup> See appendix p. 117 and Plate X, Nos. 9-11, 12.

<sup>78</sup> See appendix p. 122 and Plate X, Nos. 6, 7.

<sup>79</sup> See appendix p. 122 and Plate X, No. 5.

<sup>80</sup> See appendix p. 122 and Plate X, No. 10.

three-quarters of the way around its body and pecking on one end<sup>81</sup> seem to have been hammerstones. One soft stone has a series of narrow worn grooves that might have been caused by the abrasions of strips of skin in the process of being made into thongs.

### *The Anderson Focus*

Artifacts of the Anderson Focus appeared in Levels 9 and 10 of Lockport along the Red River<sup>82</sup> and at the Anderson site at the edge of the Pinewa Channel.<sup>83</sup>

On the basis of a general similarity in pottery and projectile points of this horizon to those of the Hopewellian time period in the mid-western United States, dates of from 1,500 to 2,500 years ago have been tentatively assigned to this focus.<sup>84</sup>

The Anderson site appears to have been but a brief occupation by a small group, and our survey revealed few large sites of this cultural complex. Like their predecessors in the region, these people appear to have lived in nomadic bands. The bone material from the lower levels (9 and 10) of Lockport reveals that subsistence was based upon hunting and fishing, and shells indicate there was some foraging.<sup>85</sup> Identification of the bones reveals that those of birds and forest animals (elk, hare, and deer) are intermingled with the fish and buffalo bones. These food remains not only tell what they ate but also allow one to infer that perhaps at least by this period the forest had invaded the area.<sup>86</sup>

An important new industry appears in this horizon; pottery-making.<sup>87</sup> Crushed rock was kneaded in the clay as tempering material. The pots all seem to have been made by the coil method. The surface of the vessels was smooth, but a few bear loose cord-wrapped paddle impressions. The dominant form was that of a coconut with a pinched vertical or slightly outflaring orifice. A few pots are undecorated except for exterior irregular punctations, spaced about an inch apart around the rim.<sup>88</sup> The majority, however, have decoration on the exterior upper half.

There were three main techniques of decoration. One was by impressing some sort of toothed object into the wet clay to make a dentate stamp.<sup>89</sup> On the shore of the river at Lockport, Peter Grant picked up a long sliver of bone with closely-spaced notches along one of its edges.<sup>90</sup> When this is pressed into clay, it makes dentate-stamp impressions very similar to those found on the pottery and may very well represent the sort of toothed object used in decorating the pottery. The designs consist of horizontal closely-spaced lines of dentate stamp on the body with oblique lines on the rim, or horizontal bands of short vertical or oblique dentate impressions encircling the upper body and rim.<sup>91</sup>

<sup>81</sup> See appendix p. 123.

<sup>82</sup> See page 19.

<sup>83</sup> See page 39.

<sup>84</sup> See page 54.

<sup>85</sup> See appendix pp. 175-178.

<sup>86</sup> Ibid.

<sup>87</sup> See appendix pp. 142-144, Laurel Ware.

<sup>88</sup> See appendix p. 150, Lockport Plain, and Plate XIV, Nos. 6-8.

<sup>89</sup> See appendix p. 144, Laurel Dentate, and Plate XIV, Nos. 4, 5.

<sup>90</sup> See appendix pp. 136, 137 and Plate XIII, Nos. 3 and 4.

<sup>91</sup> See Plate XIII, No. 2.

The second method of decorating pots was by impressing some sort of stylus, rectangular in cross-section, into the clay to make lines of adjacent or overlapping punctates.<sup>92</sup> The exact tool used to make these linear punctates is unknown. The dominant motif is a series of horizontal lines of linear punctates around the upper body and parallel oblique lines on the rim with a line of irregular punctates at the junction of rim and body.<sup>93</sup>

The final type of decoration was made by impressing into the clay some sort of object which had widely-spaced cords wrapped around it.<sup>94</sup> Studies of similar sherds from later horizons suggest that these so-called cord-wrapped stick impressions were probably made by impressing the edge of a cord-wrapped paddle into the wet clay.<sup>95</sup> Designs made by this technique correspond to those made with linear punctates.<sup>96</sup>

These pots were undoubtedly used for storage and the drawing of water. Perhaps they were also used for cooking, but there is no evidence, as, unlike those from later horizons, none had carbon adhering to their interior surfaces.

Flint knapping, done in much the same manner as that of the previous horizons, was still an important industry. Here, however, we have proof that an antler flaker was used along with pebble hammers. However, there are proportionally fewer projectile points than in previous horizons. Possibly it indicates a greater reliance on fishing and some sort of snaring of animals. The projectile points are corner-notched like some of those of Larter, while a few have a poorly-made contracting stem.<sup>97</sup> Their size suggests they were dart or spear points.

Regarding tools for skin-working: one is a large oblong plano-convex end-scraper that could not be hafted easily,<sup>98</sup> the other could have been inserted into some sort of notch or slot in a handle.<sup>99</sup> Thin flakes with retouching are still very numerous and probably served a variety of functions besides that of scraping.<sup>100</sup>

The cord impression on the pottery reveals that string was made. The fibres of this string are fine and have been initially twisted counter-clockwise (Z) to form the yarn. Two of these yarns have been tightly twisted clockwise (S) to form cords.<sup>101</sup> Just what this string was used for other than marking pottery and making nets to mark pottery is unknown. However, it is a reasonable guess that string was used for the making of such articles as dip-nets, bags, and clothes, and for tying.

One beaver tooth with a carved pointed end may have been used to slit or pierce skins.<sup>102</sup>

<sup>92</sup> See appendix p. 195, Lockport Linear, and Plate XIV, Nos. 1-3.

<sup>93</sup> See appendix p. 143, Lockport Linear, and Plate XIV, No. 1.

<sup>94</sup> See appendix p. 154, Lockport Corded, and Plate XVI, Nos. 2-9.

<sup>95</sup> See Plate XVI, Nos. 3-9.

<sup>96</sup> See Plate XIV, Nos. 1-3, and Fig. 23, Nos. 19-29.

<sup>97</sup> See appendix p. 102 and Plate VI, Nos. 4, 5.

<sup>98</sup> See appendix p. 111.

<sup>99</sup> See appendix p. 111.

<sup>100</sup> See appendix p. 110.

<sup>101</sup> See appendix p. 154.

<sup>102</sup> See appendix p. 129, Plate XII, No. 1.



Bifacial blade fragments were fairly numerous, but only one complete blade was uncovered.<sup>103</sup> It is large ( $4\frac{3}{4}$  inches long) and roughly tear-drop in outline. It may have been end-hafted.

The various kinds of chert associated with these cultural remains suggest fairly wide cultural contacts and perhaps trade. Besides the white chert from the Red River, and quartz and quartzite from the Precambrian Shield, brown chalcedony from the Knife River in North Dakota, and a reddish chert (a jasper) that is commonly used for artifacts in southern Saskatchewan were found.

### *The Nutimik Focus*

Levels 7 and 8 of the Lockport site,<sup>104</sup> as well as Level 3 of the Cemetery Point site,<sup>105</sup> belong to this horizon. No individual "pure" sites of the Nutimik Focus were excavated, because while in the field we did not realize that these manifestations represented a distinct cultural complex. Since the Nutimik Focus has a projectile point complex like the Besant culture of Saskatchewan, which has been dated as  $1580 \pm 325$ , I have estimated that Nutimik culture is from 1,000 to 1,500 years old.<sup>106</sup>

Both components occurred along bodies of water, the Red River and Lake Nutimik. Bone material suggests that during this occupation the flora and fauna were the same as they are today.<sup>107</sup> Since the Nutimik sites had no well-defined floors, it is difficult to speak about the size of the groups of inhabitants. However, at both Lockport and Cemetery Point, as well as sites from which we have surface collections, Nutimik artifacts are spread over large areas. Perhaps the population, as well as the size of the group, was larger than in the previous horizons.

Among the bones in the Nutimik levels of Lockport, those of fish were predominant.<sup>108</sup> Small-mesh net impressions on pottery of this horizon suggest that fish were caught in some sort of dip net.<sup>109</sup> Buffalo bones, though still present, are outnumbered by bones of deer, elk, beaver, bear, fox, and turtle.<sup>110</sup> Mollusc shells are fairly numerous.<sup>111</sup>

As in the previous horizon, pottery-making is an important industry. The method of manufacture of much of the pottery is the same as in the previous horizon. However, some of the pots were shaped first by coiling and then completed by being struck with a cord-wrapped paddle (perhaps to thin their sides). A few sherds have the same dentate, linear punctate and punctate decoration described for the previous horizon.<sup>112</sup> The cord-wrapped paddle edge decorated pottery is much more numerous than in the earlier horizon. Although some of it appears in simple designs of the previous period, much of it at this time period is vertically rockered and

<sup>103</sup> See appendix p. 117.

<sup>104</sup> See page 22.

<sup>105</sup> See page 28.

<sup>106</sup> Wettlaufer, 1956, p. 76.

<sup>107</sup> See appendix p. 178.

<sup>108</sup> See appendix p. 176.

<sup>109</sup> See appendix p. 171 and Plate XVI, No. 1.

<sup>110</sup> See appendix p. 176.

<sup>111</sup> See appendix p. 176.

<sup>112</sup> See appendix pp. 142-150.

sometimes has horizontal bands composed of short oblique impressions in conjunction with the horizontal lines.<sup>113</sup>

Much of the pottery, however, belongs to four new types. One of these types is smooth-surfaced with a thin wash of red ochre.<sup>114</sup> Another has knotted net impressions.<sup>115</sup> Most of the net impressions are indistinct, but all show a mesh of between one-quarter to one-half inch wide. The final two varieties are better represented, particularly at Cemetery Point. One of these is decorated by incising.<sup>116</sup> The upper half of the body bears horizontal parallel lines. Rims may be blank, or they may have parallel oblique lines or widely-spaced cross-hatching.<sup>117</sup> A line of irregular punctates usually encircles the bottom of the rim. A few sherds of this type have plain rockering just below the horizontal incised lines.<sup>118</sup> The final type has horizontal bands about one-half inch wide encircling the upper half of the body.<sup>119</sup> The bands are composed of short closely-spaced oblique impressions that seem to have been made by the edge of a scallop shell.<sup>120</sup> A few sherds of this type have a band of closely-spaced vertical lines just below the lip, and one pot has two bands of oblique plats composed of horizontal scallop-shell impressions between horizontal bands of closely-spaced oblique scallop-shell impressions.<sup>121</sup>

Some sherds of this horizon have carbon adhering to their interiors, suggesting that they were used in cooking. But since most of the sherds do not have any carbon, it seems likely that most of the vessels of this horizon were probably used for storage or water-carrying.

Bifacial blades were shaped first by percussion flaking, and then finished by pressure flaking along their edges. These blades usually are tear-drop shaped in outline and may have been hafted at the end of a handle for knives or daggers.<sup>122</sup> The projectile points, while they may have been originally made from percussion flaked blanks, usually have pressure flaking along their edges and on their surfaces. Some of the points are corner-notched<sup>123</sup> or stemmed<sup>124</sup> like those of the previous horizon; others are of a new side-notched type.<sup>125</sup> Their size and weight suggest they were used as dart or spear points for hunting.

At Cemetery Point in the Nutimik levels there were three prismatic or lamellar flakes that evince a very different technique of flint knapping.<sup>126</sup> All were struck from a prepared polyhedral core (i.e. a conical core with fluted sides). Along their lateral edges all have retouching as well as wear-flakes. They also show polishing, wear, or grinding along their dorsal ridge or ridges. The polishing, I believe, was caused by their rubbing against

<sup>113</sup> See appendix p. 143 and Fig. 23, No. 28.

<sup>114</sup> See appendix p. 171.

<sup>115</sup> See appendix p. 171 and Plate XVI, No. 1.

<sup>116</sup> See appendix p. 151 and Plate XV, Nos. 1-4.

<sup>117</sup> See appendix p. 151 and Plate XV, Nos. 1-4.

<sup>118</sup> See appendix p. 151 and Plate XV, No. 5.

<sup>119</sup> See appendix p. 151.

<sup>120</sup> See appendix p. 170 and Plate XX, No. 6.

<sup>121</sup> See appendix p. 150 and Plate XV, Nos. 5-10.

<sup>122</sup> See appendix p. 117.

<sup>123</sup> See appendix p. 101 and Plate VI, Nos. 1-3.

<sup>124</sup> See appendix p. 102 and Plate VI, Nos. 4, 5.

<sup>125</sup> See appendix p. 102 and Plate VII, Nos. 16-19.

<sup>126</sup> See appendix p. 111 and Plate IX, No. 5.

the edges of the slot of the handle into which they had been set. From this grinding as well as comparative archæological evidence,<sup>127</sup> I believe it is valid to conclude that these prismatic flakes as well as half-moon-shaped biface were set into the side(s) of handles to make the cutting edge or edges of side-bladed knives. The fragment of a beaver tooth,<sup>128</sup> whittled to a point, might have been the tool used to make the slot for these insert blades.

Superficially similar to these retouched lamellar flakes are long flat flakes with retouching along one of the long dorsal edges. These are much the same as the all-purpose tools, often called side-scrapers, that appeared in the previous horizon.<sup>129</sup>

End-scrapers are fairly numerous. All are roughly triangular or oblong in outline<sup>130</sup> and small enough to have been inserted into some sort of handle. Some of them are plano-convex in cross-section; a few are flat on top, and some are keeled or have a dorsal ridge.<sup>131</sup> There is a tendency for them not only to have steep retouching on their convex ends but to have less steep retouching along their contracting sides.

One prismatic flake is pointed, and two have retouching on either side of their points and may have been used as drills<sup>132</sup> for hard objects. Split bone awls may have been used on softer ones.

Impressions on the cord-marked pottery and the pottery marked by a cord-wrapped paddle-edge reveal that a thick (2 mm. in diameter) two-strand clockwise (S) tightly twisted string and single-strand thongs were known.<sup>133</sup>

Also the net impressions on pottery reveal that a finer string (about 1 mm. in diameter) was made by twisting two yarns counter-clockwise (Z). These cords were then knotted together (by a cow-hitch?) to form nets with a 2 to 5 mm. mesh.<sup>134</sup> Besides marking pottery, these nets were probably used for bags and dip nets for fishing.

One fragment of a polished stone adze was uncovered.<sup>135</sup> Its sides are vertical with one surface convex; the other side leading to the cutting edge is slightly concave. This adze was undoubtedly hafted and used in wood-working.

A few pebbles with battering or pecking on one of their ends functioned as hammers.<sup>136</sup>

One group of fire-cracked rocks lying on a burned area indicates that some of their food was roasted,<sup>137</sup> while conical pits found at Cemetery Point may have served to store the food.

<sup>127</sup> Clark, 1936, p. 116, Figs. 21-25.

<sup>128</sup> See Plate XII, No. 1.

<sup>129</sup> See appendix p. 110.

<sup>130</sup> See appendix p. 111 and Plate IX, Nos. 6-12.

<sup>131</sup> See appendix p. 116.

<sup>132</sup> See appendix p. 110.

<sup>133</sup> See appendix p. 154.

<sup>134</sup> See appendix p. 171.

<sup>135</sup> See appendix p. 127 and Plate XI, No. 5.

<sup>136</sup> See appendix p. 123.

<sup>137</sup> See page 28.

### *The Manitoba Focus*

Levels 5 and 6 of Lockport,<sup>138</sup> the Tuokko site,<sup>139</sup> and the Rosser Mound<sup>140</sup> are considered to be components of the Manitoba Focus in southeastern Manitoba; whereas the Stott Mound and village,<sup>141</sup> the Krieger site,<sup>142</sup> the upper levels of the Avery site,<sup>143</sup> and the United Church site<sup>144</sup> are excavated manifestations in the south-central part of the province.

There is some evidence that the Manitoba Focus represents the remains of the Assiniboine.<sup>145</sup> However, as far as eastern Manitoba is concerned, these remains seem definitely prehistoric. The fact that this cultural complex at Lockport is under the flood layers, which perhaps represent the wet period from A.D. 1350 to A.D. 1400, indicates that in this region it may date from before 1350.<sup>146</sup> On the basis of this, an A.D. 1000 to A.D. 1350 date has been tentatively assigned to the remains of the Manitoba Focus in eastern Manitoba. Bones with this focus indicate that the flora and fauna were the same then as today.<sup>147</sup>

The Lockport and Tuokko components are along the edge of large bodies of water, but the Rosser Mound, some of the sites found in survey in this region, and some of the sites in south-central Manitoba are some distance from large bodies of water and are often along the sides of hills or escarpments. Though the Tuokko site is small, implying a short occupation by a small group, many of the occupations of the focus cover a large area. The component at Lockport is 1,000 feet by 200 feet, and the village associated with the Rosser Mound covers an area 200 yards square; the excavated sites in central Manitoba are of equal size. Thus it appears that the people of the Manitoba Focus were characteristically, or at least seasonally, grouped in large bands (perhaps with as many as 200 people). However, in spite of the large extent of the sites, nowhere is the refuse very deep. This, and the fact that subsistence is mainly based on hunting, suggest they were semi-nomadic or seasonally nomadic.

In Levels 5 and 6 of Lockport and in the Tuokko site the dominant osteological materials are fish bones.<sup>148</sup> Apparently both these sites were mainly fish camps. The unilateral barbed bone points<sup>149</sup> indicate that some fish were speared and a few sherds with fabric impressions suggest that they were also caught in twined or knotted nets. The bones of animals are still numerous, however, so hunting was also carried on.<sup>150</sup> In the components of this focus farther to the west, an abundance of buffalo bones suggests subsistence activities based mainly on hunting.<sup>151</sup> The presence of small projectile points with the bones shows that the hunting

<sup>138</sup> See page 23.

<sup>139</sup> See page 40.

<sup>140</sup> Rand, 1941.

<sup>141</sup> MacNeish, 1954.

<sup>142</sup> Vickers, 1945, p. 89.

<sup>143</sup> *Ibid.*, p. 90.

<sup>144</sup> MacNeish and Capes, n.d.

<sup>145</sup> MacNeish, 1954, and Vickers.

<sup>146</sup> See page 53.

<sup>147</sup> See appendix p. 176.

<sup>148</sup> See appendix p. 176.

<sup>149</sup> See appendix p. 136 and Plate XIII, No. 3.

<sup>150</sup> See appendix p. 176.

<sup>151</sup> MacNeish, 1954.

was done with the bow and arrow.<sup>152</sup> At the Stott site near Brandon there is evidence of the stampeding of the buffalo over an embankment.<sup>153</sup> It is perhaps significant that at Lockport a correlation exists between the rise in the quantity of bird bones and the presence of arrow points.<sup>154</sup> Is it not possible that the use of the bow and arrow may have increased the efficiency of their hunting techniques so that fowl became an important item in their diet? Fresh-water shells in Level 5 at Lockport reveal another item of diet.<sup>155</sup>

Sherds are both numerous and distinctive in this focus. The technique for making the pottery was different from that of the previous horizons.<sup>156</sup> Although crushed rock was still put in the clay as tempering material, it was finer, and the pot was formed in a different manner. The vessels appear to have been made by paddling a hollow or cup-shaped mass of clay with a cord-wrapped paddle. Gradually this mass was paddled thin and thereby enlarged until a round body with thin walls was formed. The inside was then smoothed, and a brushed neck with a thickened rim, probably made by the coil method, was welded to the body. Next, the pots were decorated by the edge of the cord-wrapped paddle. Parallel oblique impressions were made on the lip and exterior and interior rims.<sup>157</sup> On the brushed necks there were a number of other designs, the most popular of which were horizontal lines encircling the neck with a band of circular exterior punctates, herringbone impressions with circular exterior punctates, and a single band of exterior punctates in the brushed area.<sup>158</sup> After this was done, the pots were fired in some sort of open hearth.

Since many sherds have carbon adhering to their interiors, I suspect that the main function of the pots was for cooking. They also may have been used for drawing water and for storage.

While the general technique of flint knapping was much the same, the end products were different. Projectile points seem to have been made from relatively thin flakes. Percussion flaking, if present in their manufacture, seems to have been employed mainly in obtaining the flake. The thin flakes always have retouching along their edges and in many cases show pressure flaking on their surfaces. This may have been done on an anvil stone. In shape they are isosceles or equilateral triangles, with or without small side-notches, yet in size they are small (less than one inch long).<sup>159</sup> Most probably all were arrow points. The shafts may have been abraded.

The tear-drop-<sup>160</sup> and half-moon-shaped bifacial blades<sup>161</sup> are bifacially worked by percussion flaking. Their edges as well as part of their surfaces have pressure flaking on them. The tear-drop-shaped blades may have been end-hafted for spears, daggers, or lances, and the half-moon-shaped blades may have been side-hafted for knives.

<sup>152</sup> See appendix p. 92.

<sup>153</sup> MacNeish, 1954.

<sup>154</sup> See appendix pp. 93, 176.

<sup>155</sup> See appendix p. 176.

<sup>156</sup> See appendix p. 156.

<sup>157</sup> See appendix p. 159 and Plate XVII, No. 7.

<sup>158</sup> See appendix p. 158 and Plate XVII, Nos. 3-9.

<sup>159</sup> See appendix p. 92 and Plate VII, Nos. 1-15.

<sup>160</sup> See appendix p. 117 and Plate X, Nos. 11, 12.

<sup>161</sup> See appendix p. 122 and Plate X, Nos. 1, 2.

One smooth section of a rib bone with rounded polished ends was uncovered by Hlady in the Manitoba Focus levels of Lockport. This may have been used as a flaking tool in the manufacture of flint artifacts.

There are a variety of tools that may have been used in working skins. As in all previous horizons, retouched flakes are very numerous and may have had a variety of functions besides those of scraping and skinning knives.<sup>162</sup> All the numerous end-scrapers are small and haftable. At the Avery and Stott village sites in central Manitoba, polished bone handles, with one end rounded and the other squared and slotted for hafting the end-scrapers, occurred.<sup>163</sup> Unfortunately none were uncovered in excavation in eastern Manitoba, though some were collected from the shore of the Lockport site. The end-scrapers themselves are most often flat or convex ventrally with steep retouched sites and a flat dorsal surface. A few are triangular in outline and plano-convex in cross-section, while a few are round or oblong in outline and plano-convex in cross-section.<sup>164</sup> Besides stone-tipped fleshers, bone fleshers were used.<sup>165</sup> The one fragment from Lockport is made from a split leg-bone of a deer with one end of the split section being ground on one surface to form a wedge-shaped scraping edge.

The split bone awls may very well have been used to pierce leather or skins.<sup>166</sup> The two-strand counter-clockwise, loosely twisted thongs or string, shown in impressions on the pottery, could have been used to sew the leather or skins together or as lines or lashings.<sup>167</sup> The double-pointed bone object from the Rosser Mound may very well have been a needle for sewing.<sup>168</sup>

In the Lockport refuse there also occurred a number of beaver teeth that had their lingual tips artificially abraded.<sup>169</sup> Beaver teeth abraded in a similar manner are found set in straight or L-shaped handles and called "crooked knives" among the Assiniboine, Cree, and many of the northern Athabaskan groups of Canada.<sup>170</sup> Among these groups the crooked knives are used to gouge wood, such as making slots in snowshoe rims. Perhaps the abraded beaver teeth were used in the same manner for the same purpose during Manitoba Focus times.

Most of the bone tools seem to have been first cut into their desired shape and then ground. Another use of bone is for whistles cut from the leg-bones of birds.<sup>171</sup> Only one possible whistle fragment occurred at Lockport in Hlady's excavation, but they are very common in Manitoba mounds. They may have had some sort of special ceremonial significance connected with the burial customs.

<sup>162</sup> See appendix p. 110 and Plate VIII, No. 3.

<sup>163</sup> MacNeish, 1951.

<sup>164</sup> See appendix p. 108 and Plate XIX, Nos. 2, 3, 6-12.

<sup>165</sup> See appendix p. 135 and Plate XII, No. 6.

<sup>166</sup> See appendix p. 135.

<sup>167</sup> See appendix p. 156.

<sup>168</sup> See appendix p. 135.

<sup>169</sup> See appendix p. 136.

<sup>170</sup> Skinner, 1912, p. 52.

<sup>171</sup> See appendix p. 135 and Plate XII, No. 7.

Three tubular objects ground out of steatite were found in the Rosser Mound.<sup>172</sup> Since one of them is fire-blackened on its interior, I believe they were smoking pipes, though they very well could have been a shaman's sucking tubes.

Artifacts made by pecking are pebble hammerstones and full-grooved mauls.<sup>173</sup> Both may have served to smash bone so that the marrow could be scooped out. The former may also have been used in working flint, and the latter could have served to drive tent pegs (if they had tents).

Though much of the stone used was of local origin, some of the flint is brown chalcedony from North Dakota. Tubular columella-shell beads drilled with a bow drill are found in some mounds. These are made from the centre portion of Gulf of Mexico conch shells. So we see that the trade contacts of this group extended over a long distance.

The burial customs give some information about certain non-material aspects of their culture.<sup>174</sup> First of all, the fact that mounds seem to have been built for one special individual hints that certain people had a higher status than others. Perhaps these individuals were some sort of chiefs. The mounds represent a fair amount of work, well organized and done in a short time by a number of individuals.

The dead were disposed of in two ways. More important personages were placed in a sitting position in cylindrical pits covered by logs and then mounds. Others seem to have been left in the open (perhaps on scaffolds) until the flesh was gone and then placed in cylindrical pits, which were covered with logs and earth. As a rule, both forms of burials occurred in the same mounds. In many Manitoba mounds, fire-pits are near the burial pits, perhaps remnants of some sort of burial rites. Burial furniture was usually placed with the corpse for use in the after-life.

### *The Selkirk Focus*

Six manifestations of the Selkirk Focus were excavated; viz. the Alexander's Point site, the Waulkinen site, Levels 1 and 2 from Zone A of Lockport, Levels 3 and 4 from Zone B of Lockport, Level 1 of Cemetery Point, and the Sturgeon Falls site. Surface collections reveal that remains of this focus are more numerous than those of any other in southeast Manitoba, but that they are totally absent from south-central and south-west Manitoba. Sherds collected from northern Manitoba and northern Saskatchewan indicate that there are many sites in that region closely related to those of the Selkirk Focus.

There is good evidence from the Alexander's Point site for connecting this cultural complex with the Cree tribe. I have assumed that these related manifestations without historic goods represent the prehistoric Cree. Levels 3 and 4 of the Lockport site are in waterlaid sands, which I believe represent the wet period from 1350 to 1400.<sup>175</sup> For the present, 1350 is considered the beginning date for the Selkirk Focus in southeast Manitoba. Seriation of pottery of the manifestations, with the historic Alexander's

<sup>172</sup> See appendix p. 128.

<sup>173</sup> See appendix p. 127.

<sup>174</sup> MacNeish, 1951.

<sup>175</sup> See page 53.

Point site as a starting point, as well as the stratigraphic trends from Levels 1 to 4 at Lockport, indicates a tentative sequence of the components of this focus.<sup>176</sup> This sequence is, from Early to Late: Sturgeon Falls, Cemetery Point, Levels 3 and 4 of Lockport, Levels 1 and 2 of Lockport, Waulkinen, and Alexander's Point.

All sites of this focus occur along waterways. Most of the sites cover a large area (100 yards by 50 yards), and the refuse layers are usually thin. At the Lockport and Sturgeon Falls sites a number of fireplaces and storage pits were found in a single occupation layer.<sup>177</sup> Thus I would estimate that at these sites a number of families lived together. Since the refuse is uniformly thin and since at Lockport in the sand layers of Zone B thin mantles of refuse and fish bones were present, it is concluded that this site represents temporary occupations.<sup>178</sup> The various uses of Pit 1 at Lockport further indicate that the occupations were not of long duration and that sites were often revisited.<sup>179</sup> Thus it is concluded that the Selkirk Focus, representing the Cree, was composed of fairly large semi-nomadic or seasonally nomadic bands.

The dominant bone materials at all these sites are fish bones.<sup>180</sup> The fragment of unilateral barbed bone<sup>181</sup> suggests the spearing of fish, while the babiche fabric impressions suggest the use of knotless nets. The close spacing of the mesh points to dip nets, but from the presence of net-sinkers we may infer that gill nets were also used.<sup>182</sup>

Besides fish bones, the bones of deer, buffalo, moose, hare, beaver, bear, wolf, muskrat, and birds were recovered from the garbage of the Selkirk peoples.<sup>183</sup> The small arrow points show one manner in which the hunting was done. It is likely, however, that such animals as the beaver, muskrat, and hare were caught in snares or traps rather than shot with the bow and arrow. The fresh-water clam shells, the carbonized wild plum pit, and burned seeds (of an unidentified variety) from Lockport give some idea of the variety of foraging. It is perhaps valid to infer from the ethnographic data on the Cree that this group at the time of the Selkirk Focus also collected wild rice.

The hearths filled with fire-cracked rock<sup>184</sup> and the numerous sherds with carbon adhering to interior surfaces show that some meat was roasted and other food was boiled. The large bell-shaped cache pits lined with bark and often containing bone and charred seeds show the manner in which food was stored. Perhaps the scapula hoes were used to dig both the hearths and storage pits.

There is some uncertainty in the ethnographic reports on the Cree as to whether they made pottery. However, the testimony from the artifacts of the Selkirk Focus, representing the remains of the prehistoric and early

<sup>176</sup> See appendix p. 140.

<sup>177</sup> See page 42.

<sup>178</sup> See page 23.

<sup>179</sup> See page 20.

<sup>180</sup> See appendix p. 176.

<sup>181</sup> See appendix p. 136 and Plate XIII, No. 3.

<sup>182</sup> See appendix pp. 128, 163.

<sup>183</sup> See appendix p. 176.

<sup>184</sup> See page 20.



historic Cree, indicates that the Western Cree did make pottery. Furthermore, if one can judge from the large proportion of sherds at Selkirk manifestations, pottery-making was an important activity. In making the pots, the grit of quartz, sand, or crushed rock was first mixed with the clay. Then some sort of thick modelled cup or pot was beaten into shape by the paddle-and-anvil method. The paddle was usually covered with tightly-knit woven babiche, but occasionally (particularly in the early stages of the Selkirk Focus) a cord-wrapped paddle was used.<sup>185</sup> The preferred shape has an out-turned short straight rim on a squat body with a rounded base and slightly angled shoulders.<sup>186</sup> While all vessels have smooth interiors, only occasionally did these pots have smoothed exteriors, and, for the most part, the fabric impressions or cord-marked impressions are visible. Some pots have fabric-impressed or cord-marked lips, and many are smooth. Most of the ceramics are undecorated. However, some lips have notched or oblique cord-wrapped paddle-edge impressions on them,<sup>187</sup> and an even lesser number have also parallel oblique cord-wrapped paddle impressions on the rims with elongated punctates at the junction of the rim and body.<sup>188</sup> One other type of decoration occurs (mainly at the Sturgeon Falls site). It consists of bands of elongated, round, or semi-lunar punctates around the rim and cord-wrapped paddle-edge impressions on the rim.<sup>189</sup> Occasionally a sherd occurs with elongated punctates at the shoulder, while a few have interior or exterior circular punctates around the neck.

After these pots were dry, they were fired at a low temperature, perhaps around a camp fire. As stated previously, the vessels' main use was probably for cooking, though a few may have served for storage (since parts of vessels occurred in the bell-shaped storage pits at Lockport) and for carrying water.

Besides the vessel fragments, two small fired clay discs occurred in Level 1 of Cemetery Point.<sup>190</sup> The function of these objects is unknown; it has been suggested they were gaming discs.

The technique of chipping flint is the same as in the previous period. Although we found no antler flakers, the anvil stones on which the flint was worked did occur. Arrow points made from thin flakes are triangular, with or without side-notches.<sup>191</sup> Many of the side-notched ones are slightly different from those of the previous period in that the bases are convex, not straight, and the notches wide, not narrow.<sup>192</sup> Larger triangular and tear-drop-shaped points, which may have been lance points, occur. Fragments of large ovoid blades are fairly common, and a few crude, roughly half-moon-shaped ones are also present.<sup>193</sup> These could have been hafted as knives or daggers.

Tools connected with the working of hides are abundant. Flat flakes with retouching along one edge are the most numerous tools and probably

<sup>185</sup> See appendix p. 170.

<sup>186</sup> See appendix p. 166 and Figure 24.

<sup>187</sup> See appendix p. 167 and Plate XIX, Nos. 4-8.

<sup>188</sup> See appendix p. 167 and Plate XIX, No. 3.

<sup>189</sup> See appendix p. 170 and Plate XIX, Nos. 1, 2.

<sup>190</sup> See appendix p. 175.

<sup>191</sup> See appendix p. 89 and Plate VII, Nos. 1-15.

<sup>192</sup> See appendix p. 104 and Plate VII, Nos. 1-3.

<sup>193</sup> See appendix p. 122.

had a number of uses.<sup>194</sup> End-scrapers are mainly round and oblong in outline and plano-convex in cross-section, but a few triangular in outline, either plano-convex or flat on top, occurred.<sup>195</sup> All are haftable, and rib fragments with one end rounded and the other slotted for the insertion of the end-scrapers indicate the type of handle in use. Besides these stone-tipped fleshing tools, a fragment of deer leg-bone that had been bevelled to a cutting edge occurred; I believe this also was used as a scraping tool.<sup>196</sup> At all the components of the Selkirk Focus there are fragments of flat stones, ovoid in outline, with rough percussion chipping along their edges. All are large (over 4 inches in length) and made from schist, sandstone, shale, or granite, which do not allow for a sharp edge.<sup>197</sup> These are very similar to blades hafted on long wooden handles for abrading or finishing skins now used by Athabascans along the Mackenzie River. Therefore, it has been concluded that people of the Selkirk Focus were using a similar tool for the same purpose.

Associated with these tools was a series of bone awls that could have been used for piercing birch bark, skins, or leather.<sup>198</sup> Some of these awls are made from unidentifiable split fragments of bone; a few are made from deer ulnas, and one is very long and made from the femur bone of a deer. Also, there is one bone needle.<sup>199</sup> The decorations on the pottery reveal impressions of sinew and strands of rawhide that might have been used for sewing the hides together.

These impressions on the ceramics, however, reveal not only that thongs of leather were made, but that these were woven into nets and fabrics. Unfortunately, these impressions were made by paddling, so they are not always clear. Often two sets of impressions overlap, and sometimes they are smudged. However, in spite of these difficulties, fifty sherds bearing clear impressions were found, and the following generalizations are based on these.<sup>200</sup> Most of the sherds (47) show plain twine impressions, i.e., a series of parallel warp elements has two weft elements with one element passing below the warp and then above, and the other element passing above the warp and then crossing the first element and passing below the warp. Two sherds had a wrapped-twine weave; i.e., a lattice of parallel warp and weft elements woven together by a binding element and wrapped around the crossing of the warp and weft. The final sherd seems to have the impressions of a simple coiled net; i.e., one horizontal element has a series of loops going around the next horizontal element which has loops between the elements catching it; these elements in turn go around the next horizontal element, and so forth. Though I examined most of the other sherds carefully, I was unable to clearly discern other types of weaves, but a few looked as if they were twilled (over two, under two). How these various kinds of weaves were used, other than in decorating pottery, is difficult to state exactly. However, the weaving could have been used to make fish-nets, bags, and clothes.

<sup>194</sup> See appendix p. 110.

<sup>195</sup> See appendix p. 107 and Plate XIX, Nos. 2, 3, 6-12.

<sup>196</sup> See appendix p. 135 and Plate XIX No. 6.

<sup>197</sup> See appendix p. 116 and Plate IX, No. 1.

<sup>198</sup> See appendix p. 135.

<sup>199</sup> See appendix p. 137 and Plate XVI, No. 4.

<sup>200</sup> See appendix p. 163 and Plate XVIII, Nos. 1-3.

Beaver teeth with abraded lingual surfaces may have been hafted to form crooked knives,<sup>201</sup> while a celt made from antler may have been lashed at right angles to a handle.<sup>202</sup> Both these tools were probably used in wood-working.

The making of bone tools by cutting and polishing appears to have been an important activity. Bone tools include awls, barbed points, needles, scapula hoes or shovels, beaver teeth, celts, and fleshing tools.<sup>203</sup> Flat slabs of slate or shale with ground edges<sup>204</sup> may have been the sort of implement used to abrade the bone into shape.

Pebble hammerstones, full-grooved mauls, and a pebble net-sinker<sup>205</sup> occurred.

In many parts of the Selkirk Focus refuse, charred fragments of birch bark were found, and at Lockport in Pit 1 a fragment was found sewn together.<sup>206</sup> Furthermore, one edge of it appears to have some sort of carved decoration. In Pit 1 was a shell filled with red ochre.<sup>207</sup> Thus the prehistoric Cree may have done painting and bark-carving, as well as pottery decoration, as outlets for his artistic impulses.

Burial customs at present are known only from the single flexed burial at Lockport and from various bundle burials washed out by the Red River.<sup>208</sup> The bundle burials suggest that the dead were placed on scaffolds before burial, while the pottery and dog with the flexed skeleton at Lockport suggest some sort of burial ceremony and belief in the after-life.

## RELATIONSHIPS

This section has been divided into two parts. One is a discussion of the relationships between the various cultural complexes in southeastern Manitoba. This is based upon a series of comparisons between the various ancient congeries of artifacts. Such comparisons, it is hoped, will reveal continuities or discontinuities in the sequences and thus shed light on cultural development, movements of peoples, and diffusion of ideas or traits into the area. In contrast to this study of internal relationships, comparisons have been made between the cultural complexes of southeastern Manitoba and those of adjacent areas. The external relationships indicated by these comparisons may not only show the cultural connections of the archæological material of eastern Manitoba at various time periods, but possibly indicate the source or sources of various cultural traits or cultural complexes, thereby throwing some light on prehistoric diffusion or migrations in this region.

A comparison of the Whiteshell Focus with the other cultural complexes of southeastern Manitoba reveals very few significant resemblances. However, lanceolate-shaped projectile points (McKean Lanceolate) and disc scrapers in both the Larter and Whiteshell foci are significant traits

<sup>201</sup> See appendix p. 136 and Plate XIII, No. 1.

<sup>202</sup> See appendix p. 137 and Plate XIII, No. 7.

<sup>203</sup> See appendix p. 134 and Plate XIII, Nos. 1-8.

<sup>204</sup> See appendix p. 128.

<sup>205</sup> See appendix p. 126.

<sup>206</sup> See page 26.

<sup>207</sup> See page 26.

<sup>208</sup> See page 20.

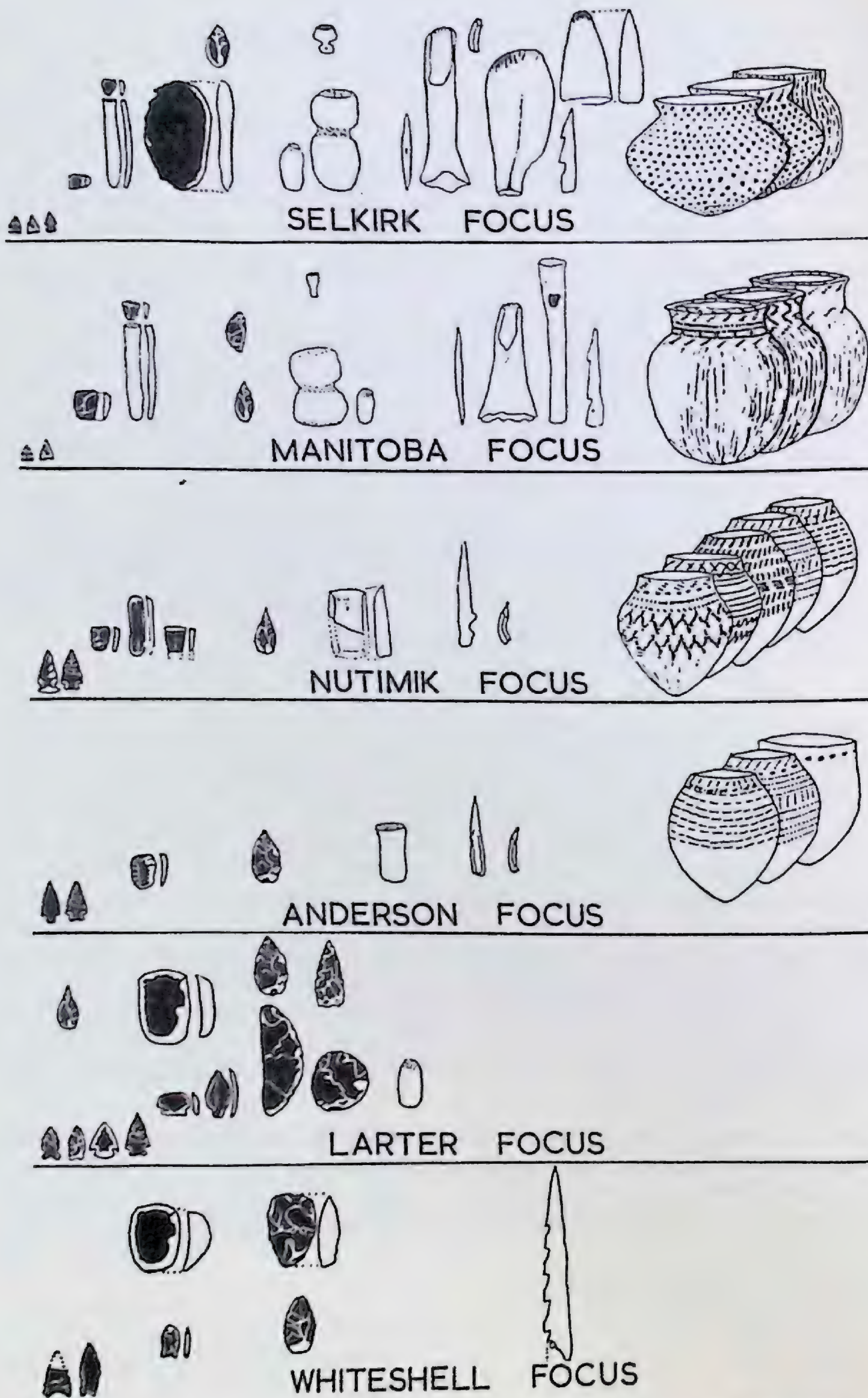


Figure 13. Sequence of diagnostic artifacts in southeast Manitoba.

in common. These traits, as well as the more general ones such as ovoid blades, large plano-convex end-scrapers, small plano-convex end-scrapers, flake side-scrapers, hammerstones, choppers, and buffalo hunting subsistence pattern, reveal some sort of cultural linkage. Perhaps the Whiteshell Focus is ancestral to that of Larter. If this is true, then the transitional steps showing the acquisition of a host of new traits by the Larter people has not been found.

Although the Larter Focus has some similarity to the Whiteshell cultural complexes, it also has a few resemblances to the Anderson Focus. The most significant of these are the corner-notched points, and of lesser importance are the large and small plano-convex end-scrapers, side-scrapers, and large blades. Although the differences far outweigh the similarities, there is the possibility that there was continuity between the two.

The clearest evidence for continuity in Manitoba, however, is between the Anderson and Nutimik foci. The occurrence of the same types of dentate and linear punctate stamp as well as plain and cord-wrapped paddle-edge decorated pottery, the small triangular plano-convex end-scrapers, the corner-notched projectile points and the pointed beaver teeth, as well as a few generalized traits in the Anderson and Nutimik foci, show them to be closely related. Furthermore, their stratigraphic position at Lockport would seem to indicate that Anderson is ancestral to Nutimik.

Following the Nutimik Focus is the Manitoba Focus. Between these two there are only a few resemblances of general traits (such as the use of cord-wrapped stick decorated pottery), but for the most part there are a host of differences. If there is any cultural continuity, there are a number of transitional steps between the two that we know nothing of.

However, the Manitoba Focus does have a number of resemblances to the Selkirk Focus that follows it. These similarities include triangular side-notched and un-notched projectile points, long bone fleshers, unilateral multi-barbed bone points, an abraded beaver tooth gouge, small flat triangular end-scrapers, a full-grooved maul, rib-bone scraper handles, half-moon-shaped side blades, and the decoration of pottery by the edge of a cord-wrapped paddle. Certainly these may be cited as evidence of a close relationship between the two foci. However, there is considerable evidence against considering Selkirk as developing from Manitoba. Much of the pottery of the two manifestations is very different, as are the burial customs (and I might add that the physical type appears different). Other differences would be the columella beads, bird-bone whistles, and tubular pipes, unique to the Manitoba Focus, while scapula hoes or shovels, crude side-notched projectile points, large hoe-like skin abraders, flat slate fragments with ground edges, bell-shaped storage pits, antler celts, and large triangular lance heads are present in the Selkirk but not in the Manitoba Focus. Furthermore, there is some evidence for considering the Manitoba Focus to be ancestral Assiniboine, while the Selkirk Focus is ancestral Cree. Thus I have interpreted the Selkirk-Manitoba foci resemblances as indicating that these two cultures were perhaps in contact with one another and had undergone a period of mutual exchange of ideas and traits even though the Manitoba Focus appeared in eastern Manitoba first and the Selkirk Focus later replaced it.

Thus, in summary, in eastern Manitoba there is a thin thread of cultural continuity from the Whiteshell Focus to the Anderson Focus, and the Anderson Focus develops into the Nutimik Focus. Then there is seemingly a break in the sequence as the Manitoba Focus appears, which in turn is replaced by the Selkirk Focus, even though the last two have greatly influenced each other.

Turning now to a comparison of the cultural complexes of southeastern Manitoba with those of other areas, it is best to start with the Whiteshell Focus. The only excavated sites in Manitoba with artifacts bearing any resemblance to those from the lower levels of Cemetery Point are two sites in southwestern Manitoba, the Lake Shore site excavated by Chris Vickers on the north shore of Rock Lake just below the Avery Hotel,<sup>209</sup> and the lowest level of the United Church site nearby.<sup>210</sup> The presence of McKean Lanceolate points, concave based points reworked into end-scrapers, flat-topped snub-nosed scrapers, as well as the more general choppers, ovoid blades, and flake side-scrapers, indicates a nexus between the Lake Shore site and the Whiteshell Focus. However, the large scrapers, certain concave-based point types, and large unilateral barbed bone points of the Whiteshell Focus, do not occur at Avery Lake, nor do the Duncan Points of Lake Shore appear in our more easterly cultural complex.

As closely related to the Whiteshell Focus as the Lake Shore Focus are the components in the lowest levels of the Mortlach site in Saskatchewan and the lower levels of the McKean site in Wyoming.<sup>211</sup> Common to both are such specialized traits as McKean Lanceolate and Nutimik Concave points, spoke shaves and prismatic end-scrapers. There also are some more general traits held by both, such as choppers, ovoid and triangular bifacial blades, large irregular plano-convex end-scrapers, snub-nosed flake end-scrapers, and thin and thick side-scrapers. Differences are the manos and metates, the Duncan points, the sandstone disc from the McKean site, and the stemmed end-scrapers from Cemetery Point.

Seemingly related to this same horizon is the component in the lower part of the second occupation in Birdshhead Cave in the Wind River Basin, Wyoming,<sup>212</sup> the lower levels of 48CK4 in the Keyhole Reservoir in north-eastern Wyoming,<sup>213</sup> and the Cheyenne Falls Focus in South Dakota.<sup>214</sup> I say these are seemingly related, because all these components have yielded only very limited samples of artifacts. However, they are like the lower levels of the McKean site and the Whiteshell Focus in having McKean Lanceolate points (and no corner-notched ones), and all have spoke shaves, choppers, plano-convex end-scrapers, flake end- and side-scrapers, bifacial blades, and hammerstones in common, except at Birdshhead Cave.

Thus the affiliations of the Whiteshell Focus are into the plains and prairies of Canada and the United States. It also should be noted that at Mortlach, the McKean site, and Birdshhead Cave there are Whiteshell-like materials under Larter-like materials.

<sup>209</sup> Materials in the Vickers Collection at the Provincial Library in Winnipeg, Man.

<sup>210</sup> MacNeish and Capes, 1958.

<sup>211</sup> W. Mulloy, 1954; Wettlaufer, 1956.

<sup>212</sup> W. L. Bliss, 1950.

<sup>213</sup> J. T. Hughes, 1949.

<sup>214</sup> W. Mulloy, 1951.

Larter also has its closest affiliations to the southwest and is definitely related to the components in the upper levels of the McKean site in north-eastern Wyoming,<sup>215</sup> the lower levels of Pictograph Cave near Billings, Montana,<sup>216</sup> in Signal Butte I in Nebraska,<sup>217</sup> and the Pelican Lake levels at the Mortlach site in Saskatchewan.<sup>218</sup> Of particular significance are the McKean Lanceolate, Anderson Corner-notched, and Hanna Corner-notched points. They are common to all four manifestations. Parkdale Eared points occur at all but Pictograph Cave I, while Larter Tanged occur at Larter and in the upper levels of the McKean site. It might be added that Larter Tanged also occurs in the second level of Pictograph Cave and Signal Butte. Besides these specific traits in common, more general ones occur, such as round-base and triangular points, large ovoid oblong, round and triangular bifaces, choppers, flake side- and end-scrapers, large plano-convex end-scrapers, large plano-convex crude side-scrapers, and pebble hammerstones. There are some traits that appear in two or more of these manifestations, and a few that are individual to each site. However, in spite of these differences there is a complex of artifact types that link the Larter site to the upper levels of the McKean site, Signal Butte I and Pictograph Cave I. There are a number of other components such as those of the Jackson Narrows Focus of the Angostura Basin of South Dakota,<sup>219</sup> Level 6 of Ash Hollow Cave in Nebraska,<sup>220</sup> the upper part of Level 2 of Birdhead Cave, Wyoming,<sup>221</sup> site 48CK204 in the Keyhole Reservoir in Wyoming, Muddy Creek (48FR34), Upper Muddy Creek (48FR33), and Poison Creek (48FR5) in the Shoshoni Basin of Wyoming,<sup>222</sup> that have similar projectile points and tools. Unfortunately, most of these sites either do not have a sufficient sample of tools or have not been fully enough reported to determine how closely they are related to Larter.

Following the Larter Complex in eastern Manitoba is the Anderson Focus. Not only does this new manifestation see the addition of many new traits, the most important of which is pottery, but its connections seem to be to the east, not the west. The Anderson Focus has its closest affiliation with the Laurel Focus of northern Minnesota. Evidence that they are related is most clearly seen by a comparison of their respective ceramic complexes.<sup>223</sup> The pottery of both complexes has grit temper, is constructed by coil method, and usually has smooth surfaces, though a small percentage of sherds are cordmarked. Though there is some range in variation in form of Laurel burial pottery, the predominant shape of the vessels of both foci is roughly coconut-shaped with a vertical pinched lip. Decoration covers the upper half of the body and is predominantly dentate or linear stamped. Unfortunately, I was able to see only a small sample of sherds from the Laurel Focus at the Ceramic Repository at the University of Michigan. These few sherds could be classified as Laurel Dentate and Lockport Linear pottery types, but whether all Laurel sherds are as similar to those from eastern Manitoba is at present unknown, as there is

<sup>215</sup> W. Mulloy, 1952.

<sup>216</sup> W. D. Strong, 1935.

<sup>217</sup> J. T. Hughes, 1949.

<sup>218</sup> Wettlaufer, 1956.

<sup>219</sup> J. T. Hughes, 1949.

<sup>220</sup> J. L. Champe, 1946.

<sup>221</sup> W. L. Bliss, 1950.

<sup>222</sup> Wheeler, pers. comm.

<sup>223</sup> Wilford, 1955.

no full description of Laurel pottery nor were the sherds from the original site available to me. Further confirmation of a nexus between Laurel and Anderson foci is the presence, in both, of beaver teeth cut obliquely across the labial surface so that they form points. Also stemmed and corner-notched points occur in both, as do leaf-shaped knives, snub-nosed scrapers (trapezoidal or triangular in outline), split bone awls, and flake side-scrapers.<sup>224</sup> Thus Laurel and Anderson are closely linked, but since Laurel has burial mounds and a host of bone, copper, and stone tools not found in Anderson, they are far from identical.

The Nutimik Focus that develops from the Anderson Focus has affiliations not only in Minnesota but also apparently in south-central Manitoba. The ceramics of the Nutimik Focus are similar to that of the Rock Lake Focus of south-central Manitoba<sup>225</sup> and the Malmo Focus of Minnesota.<sup>226</sup> The pottery from these three sites is grit-tempered and has mainly smooth surfaces, but a significant minority bears cord-marking. Also, the vessels have short vertical necks and elongated bodies with sub-conoidal bases. Decoration is the same in that it is confined to the neck and upper body and consists of predominantly cord-wrapped paddle-edge impressions or incising, with some having dentate stamping or linear punctations in the minority. Some of the cord-marked sherds I have seen from Howard Lake in northern Minnesota and from Rock Lake look as though they belong to the Lockport Corded type. There are some pottery types distinctive to each of these sites mentioned above, but on the whole most of the pottery is common to all or at least very similar. Besides the ceramic correspondences, lamellar flakes, large corner- and side-notched points and triangular end-scrapers occur in the Malmo (Kern and Malmo sites),<sup>227</sup> Rock Lake,<sup>228</sup> and Nutimik foci, as well as ovoid and triangular blades and side-scrapers. Also in Nutimik and Rock Lake there are beaver teeth cut to a point. The three foci, of course, differ in a number of details, such as the burial mounds and distinctive associated traits in the Malmo Focus, the horizontally corded pottery of the Rock Lake Focus, and the obliquely decorated pottery and polished celt of the Nutimik Focus. However, in spite of the differences among these foci, they bear a core of resemblances which indicate they are related.

However, in Minnesota and Manitoba it is on the next horizon, that of the Blackduck<sup>229</sup> and Manitoba foci, that the greatest resemblances occur. The few sherds I saw from the Blackduck Focus were classifiable into Manitoba Focus types. Wilford's description and illustrations of the pottery<sup>230</sup> reveal it to be extremely similar to (if not the same as) Manitoba Focus ceramics, as it has grit temper, cord-marked bodies that are elongated globular in shape with a short vertical and thickened lip, with cord-wrapped paddle-edge decoration on the vertically brushed neck, rim, and lip. Even the motifs—oblique lines on the lip and rim and horizontal lines on the neck, or herringbone patterns on the neck and circular exterior punctates—are the same. Besides the ceramic similarities, the triangular

<sup>224</sup> Wilford, 1955.

<sup>225</sup> MacNeish and Capes, 1958.

<sup>226</sup> Wilford, 1950, p. 135, and Wilford, 1944, p. 333.

<sup>227</sup> Ibid.

<sup>228</sup> MacNeish and Capes, 1958.

<sup>229</sup> Wilford, 1955.

<sup>230</sup> Wilford, 1945a, p. 313-315.



projectile points with or without side-notches, long bone fleshers, the unilateral barbed bone points, the whistles made from bird leg-bones and the antler flaking tools—all of which are rather distinctive traits—occur at the two foci, as well as such more general traits as flake side-scrapers, flat side-scrapers, flat triangular end-scrapers, plano-convex snub-nosed end-scrapers, bone awls, ovoid blades, and pebble hammerstones.<sup>231</sup> The burial complexes of the two are very similar but not identical. Both have ochre-covered flexed burials in sitting position with grave goods placed in deep cylindrical pits in mounds.<sup>232</sup> The Manitoba Focus, however, does have some secondary burials in the pits and usually has a log covering the burial pits, while these traits have not been reported for the Blackduck Focus. Also, the Manitoba Focus used columella beads, grooved axes or mauls, semi-lunar blades, bone scraper handles, and beaver tooth gouges, which are absent in this Minnesota focus. The latter has tubular copper beads, broad convex-based flint blades, antler projectile points, and a ground slate knife not found in Manitoba cultural complexes. Some of the Manitoba Focus traits not found in the Blackduck Focus, as well as the ones that do occur, appear in Minnesota in the poorly-defined Arvilla Focus.<sup>233</sup> These include flexed seated and bundle burials in deep pits in mounds with grave goods including notched triangular points, unilateral multi-barbed bone points, bird bone whistles, beaver teeth gouges, conical pipes, and columella beads. These mounds of the Arvilla Focus of Minnesota, as well as those in the Melita Focus of southeast Manitoba, eastern North Dakota, and southeast Saskatchewan, all seem to be somehow related to the Manitoba Focus, but until further analysis and excavation have been undertaken, this relationship cannot be clearly understood.

In counter-distinction to the earlier foci of Manitoba, the final archaeological complex, Selkirk, has no counterpart in adjacent areas that have been intensively studied. Fabric-impressed sherds like those of the Selkirk Focus appear over a wide area. Those found on Reindeer Lake and Montreal Lake in north-central Saskatchewan, a few of those from the Red Deer region of Alberta, and those reported by Wedel from northwestern Montana<sup>234</sup> are extremely similar, but whether they are associated with a complex like that of the Selkirk Focus remains to be seen. There also are found with the Selkirk Focus some shell-tempered cord-marked sherds and wide-lined incised and punctated sherds like those found in the Cambria sites of southern Minnesota.<sup>235</sup> These, however, show trade connections, not genetic relationship. Of course, as has been previously demonstrated, some of the Selkirk Focus materials can be shown to be similar to those of the Manitoba Focus, but this seems to be due to natural interchange between two distinct traditions rather than a genetic connection.

<sup>231</sup> Ibid.

<sup>232</sup> Wilford, 1955.

<sup>233</sup> Ibid.

<sup>234</sup> Wedel, 1951, pp. 130-138.

<sup>235</sup> Wilford, 1945b.

## CHAPTER IV

### CONCLUSIONS, SPECULATIONS, AND PROBLEMS

#### SUMMARY

The earliest human remains of which we have good knowledge in eastern Manitoba are the Whiteshell Focus. These buffalo hunters occupied this area about 3,500 to 5,000 years ago. Distinctive for this complex, which includes choppers, side-scrapers, large and small end-scrapers, and ovoid blades, are the lanceolate points with concave bases, and a large unilateral multi-square barbed antler point. This Manitoba cultural complex appears to be related to similar ones in the northern Plains, such as found in the lowest levels of the McKean site in Wyoming. The relative rarity of this cultural manifestation in Manitoba and the abundance of sites of this type farther west make me suspect that the Whiteshell Focus moved into Manitoba from the west.

The Larter Focus, which may have developed from the Whiteshell Focus, seems to have existed in Manitoba from 2,500 to 3,500 years ago. It again is related to similar manifestations in the Great Plains, such as those found in the lowest levels of Pictograph Cave of Montana, in Signal Butte I, Nebraska, in the upper levels of the McKean site, the Jackson Narrows Focus of South Dakota, and the Pelican Lake and Sandy Creek foci of southern Saskatchewan. Characteristically, these people are hunters, their diagnostic projectile points including deeply corner-notched types, side-notched types with concave bases, and lanceolate forms. Besides these diagnostic elements, a variety of bifacial blades and heavy scrapers and choppers occur. In the Great Plains this sort of cultural manifestation seems to continue to develop without too much outside influence. However, in Manitoba the situation is very different.

The next culture in Manitoba, called the Anderson Focus, sees the first appearance of pottery. Whether this culture represents the addition of pottery to a Larter-like complex, or whether it represents a new group who moved in from Minnesota is at present unknown. Certainly the artifact complex is very similar to the Laurel manifestation of northern Minnesota. Diagnostic of this horizon is smooth pottery with linear punctate and dentate stamp decorations, as well as corner-notched points and pointed beaver teeth. The general resemblance of this horizon to other Middle Woodland horizons farther east suggests that a date of 1,500 to 2,500 years ago is not unreasonable. These groups seem to have an economy based upon hunting, fishing, and food-gathering. The general similarity of these materials to those east of Manitoba and the almost complete absence of them north, west, (such as the contemporaneous Besant Focus of Saskatchewan), or south of Manitoba, suggests that influences or movements of peoples must have come out of the Eastern Woodlands.

The succeeding cultural manifestation in Manitoba, called the Nutimik Focus, seems to have developed directly out of the Anderson Focus. Characteristic of this new horizon is the cord-wrapped paddle-edge incised and oblique punched decoration of the pottery, as well as the addition of polished celts and corner-notched points. These additions also occurred in the Malmo Focus of Minnesota and Rock Lake Focus of southwest Manitoba. Although there is no direct evidence to indicate the direction of diffusion of these different traits, their relative abundance in Minnesota hints that they may have moved from east to west.

Whether the Nutimik Focus, or something like it, developed into the Manitoba Focus by a transitional step as yet unfound, or whether it represents a new people moving into the area cannot at present be established. Wilford has suggested that in Minnesota the Blackduck Focus developed from the Mille Lacs Aspect, Malmo Focus,<sup>236</sup> and perhaps a similar development took place in Manitoba. The Manitoba Focus has its closest similarities to the Blackduck Focus in Minnesota, and both are characterized by cord-marked pottery that has cord-wrapped paddle-edge decorations on its vertical necks and thickened lips. Furthermore, characteristically both have small triangular notched or un-notched arrow points, unilateral multi-barbed bone fish spears, beaver-tooth gouges, long bone fleshers, and a burial mound complex. There is considerable evidence to suggest that these people represent the Assiniboine. From Lockport there is an indication that they were in Manitoba before 1350, and that they moved westward after that date. Perhaps the Blackduck Complex is even earlier and may indicate that the Assiniboine (Manitoba Focus) originally migrated from Minnesota. Or perhaps the Assiniboine are the original inhabitants of both Minnesota and Manitoba and later left Minnesota and eastern Manitoba.

Superseding the Assiniboine occupation in eastern Manitoba is a cultural complex called the Selkirk Focus, which represents the material remains of the Cree. Exactly where this cultural manifestation was before A.D. 1350 is at present unknown. However, since there are no similar earlier remains to the southeast in Minnesota or to the south in North Dakota, or to the west in Manitoba and Saskatchewan, it seems probable that this group moved in from the north or the northeast. This horizon, though having some similarities in stone and bone artifacts to the Manitoba Focus, has distinctive fabric-impressed pottery, plano-convex scrapers round in outline, flexed burials in pits, and large hoe-like stone scrapers. This seems to be the cultural complex that existed in eastern Manitoba up until the arrival of the early European explorers. The subsequent acculturation to the Euro-Canadian culture and the subsequent western movement of the Cree along the south edge of the boreal forest and into the Plains have been recorded in journals of early Canadian history and by ethnologists and are beyond the scope of this paper.

In Manitoba we have a long history of aboriginal occupation. At first, when much of this area was still probably a plains, subsistence was primarily based on buffalo hunting, but the subsequent invasion of the forest saw a shift to more emphasis on fishing and on the hunting and trapping of woods animals. Throughout this long history there is a gradual

<sup>236</sup> Wilford, 1955, p. 136.

increase in the size of the population and a slight but steady elaboration of material culture. Burial mounds, which arrived during the Manitoba Focus, probably represent a significant elaboration in the socio-religious realm. In this time period, the bow and arrow became the dominant weapon. Probably the introduction of this technologically superior weapon augmented the food supply. However, these prehistoric cultural changes seem to have been of a much slower and much less profound nature than that wrought by the invading Whites with their horses, guns, and a radically different cultural pattern, which changed both the Cree and Assiniboine into what they were during early historic times and what they are today.

Let us turn now to more general archæological problems bearing on the position of Manitoba in the wider framework of North American prehistory. The first of these concerns the diffusion of pottery from Asia to the Eastern Woodlands. Numerous authors have pointed out the host of distinctive individual ceramic traits plus complexes of ceramic traits common to the prehistoric cultures of northeastern Asia and the Eastern Woodlands of North America.<sup>237</sup> Many of them have felt that these two ceramic developments are so similar that they must be genetically connected. With this conclusion I certainly agree. Moreover, McKern,<sup>238</sup> Griffin,<sup>239</sup> and others feel that in their movement or spread, these ceramic traits would have come through southern Manitoba. The present archæological evidence is categorically opposed to such a hypothesis. First of all, pottery of the Early Woodland types is absent in southern Manitoba. Such pottery when found to the east, as in Wisconsin,<sup>240</sup> Illinois,<sup>241</sup> Ontario,<sup>242</sup> and New York,<sup>243</sup> is often under Middle Woodland pottery similar to the earliest pottery in southeast Manitoba. Furthermore, dates for Early Woodland<sup>244</sup> east of Manitoba are as early as that of Larter pre-pottery culture, which is stratigraphically under the first pottery in the Anderson Focus of Manitoba.

Two other sets of evidence, though not so strong as that mentioned above, indicate further that pottery did not diffuse through the interior boreal forest and southeastern Manitoba when it moved into the Eastern Woodlands. First of all, considerable archæological surveying in the boreal forest of the Northwest Territories, Yukon, and Alaska has been done. All in all, over 300 sites are known. Not one Woodland potsherd has been found on or in any of them.

Secondly, the distribution of pottery in the Great Plains gives evidence that pottery moved into that area from the east rather than from the northwest. Archæological reconnaissance in the northwestern Plains and prairies (i.e. Alberta) revealed that, of the small amount of pottery found, most of it is very similar to Selkirk Fabric-impressed or Regina Ware of Late Woodland times. Furthermore, there is little like the Manitoba wares, and not a single sherd that even vaguely resembles Early or Middle

<sup>237</sup> Mc Kern, 1937; Griffin, 1946; G. Gjessing, 1948; Ritchie and MacNeish, 1949, *et al.*

<sup>238</sup> Mc Kern, 1937, p. 143.

<sup>239</sup> Griffin, 1953, p. 42.

<sup>240</sup> Ritzenthaler, 1946.

<sup>241</sup> Cole and Deuel, 1937.

<sup>242</sup> Ritchie, 1949.

<sup>243</sup> Ritchie and MacNeish, 1949.

<sup>244</sup> Ritchie, 1955, pp. 65-74.

Woodland pottery.<sup>245</sup> Saskatchewan presents a slightly different picture. Like Alberta, it has a fair amount of Selkirk Fabric-impressed ware, but it does have Manitoba wares and ones like those described for the Hagan site. There are but a handful of sherds belonging to Middle Woodland times, and even those are more like the more recent Lockport Corded wares than the earlier Laurel wares.<sup>246</sup> Griffin has pointed out a similar situation in regard to the spread of pottery in the Great Plains of the United States where there has been considerable archæological reconnaissance, as well as supplementary excavation.<sup>247</sup> Here the earliest pottery seems to be on the Hopewell time-level in the eastern Plains and as one moves west, one finds that pottery was introduced progressively later. Thus, although the Asiatic-Woodland ceramic similarities indicate a spread from Siberia to eastern North America, it is my opinion that Southeastern Manitoba was not on the direct route of that diffusion.

At first glance this seems to negate the Siberian-Woodland ceramic connection. However, I do not believe it does. A general survey of ceramic horizons indicates that Early Woodland pottery is concentrated in the northeastern quarter of the United States (Wisconsin to Maine).<sup>248</sup> Carbon 14 dates indicate that the earliest of this Woodland pottery (Vinette I), as well as the earliest Middle Woodland (Early Point Peninsula), occurs in Upper New York State.<sup>249</sup> Of possibly as early a date is the Woodland-like pottery in the western Arctic. This pottery has been found on the Firth River on the Yukon-Arctic coastal plains.<sup>250</sup> Here, cord-marked, dentate-stamped, combed, and check-stamped pottery with distinctive Woodland vessel forms appear to have been grafted onto an older Cape Denbigh-like lithic tradition (making the total complex superficially very much like the sequence found in the Lena River area of Siberia).<sup>251</sup> Cape Denbigh-like congeries were first found in northern Alaska, but they also occur at Dismal Lakes near Coppermine on the Arctic coast of the western Northwest Territories, near Igloodik at the northwest corner of Hudson Bay, and on the Knife River of Manitoba at the west end of Hudson Bay.<sup>252</sup> So far, the Firth River is the only site that bears, first the Cape Denbigh lithic complex, then that complex plus pottery. But is it not possible that Woodland pottery, besides being grafted onto a Denbigh-like complex on the Firth River, also was diffused to similar complexes along the Arctic coast to Hudson Bay down the west side of the Bay, and thence spread into the Eastern Woodlands from the southern part of Hudson Bay? Such a hypothesis would account for the diffusion of Asiatic pottery to the Eastern Woodlands, as well as explain why the earliest Woodland pottery so far uncovered comes from Upper State New York and not from the Northern Plains. It also would indicate a way in which this Asiatic-derived pottery, after some time-lag and further development (and perhaps some outside stimulus), could have spread from the east into Manitoba. Only future archæological endeavours

<sup>245</sup> This statement is based upon the findings of W. Mulloy and M. Wormington in their survey of southern Alberta for the Glenbow Foundation of Calgary and the collections of the National Museum of Canada.

<sup>246</sup> Wettlaufer, Survey of Saskatchewan, in files of the National Museum of Canada.

<sup>247</sup> Griffin, 1952, p. 361.

<sup>248</sup> Ibid.

<sup>249</sup> Ritchie, 1955.

<sup>250</sup> MacNeish, 1956.

<sup>251</sup> Tolstoy, 1953.

<sup>252</sup> Giddings, 1956.

can confirm or refute this hypothesis. I believe that archæological investigation along the southern and western coastal plains of Hudson Bay may yield the crucial data for the solution of the problem of the origin of the Woodland ceramic complex.

Closely related to the problem of the origin of Woodland pottery is that of the development of the burial mound complex. Although there is considerable unanimity among archæologists that Woodland pottery was derived from Asia, opinions differ as to the origin of the burial mound complex of the Woodland Indians. There appear to be three schools of thought: those who derive the burial mound complex from Asia (along with pottery),<sup>253</sup> those who derive it from the Formative Period of Mexico,<sup>254</sup> and those who consider it an indigenous development. Unfortunately, as burial mounds are less numerous and harder to find than potsherds, there is little good evidence for the solution of this problem at the present stage of investigation. As far as Manitoba is concerned, burial mounds earlier than Manitoba Focus times have not been uncovered. Furthermore, burial mounds appear in the Laurel Focus in Minnesota, whereas they have not been found associated with the Laurel-like Anderson Focus of Manitoba. This would seem to indicate an east-west spread of burial mounds, but since we have uncovered no burials of any kind for the earlier part of the Manitoba sequence, this hypothesis can hardly be considered to have been proved. Thus our Manitoba archæological endeavours have thrown no light on the problem of the origin of Woodland burial mound complex.

Now let us consider what the recent excavations can contribute to the history and early movement of the aboriginal groups of Manitoba: the Assiniboine and Cree. If the Manitoba Focus represents the material culture of the Assiniboine, and there is considerable evidence that it does, then at least 1,000 years ago the inhabitants of the southern one-third of Manitoba were Assiniboine. Furthermore, related groups occupied the Lake of the Woods area and northern Minnesota (the Blackduck Focus) as well as southeast Saskatchewan (the Melita Focus). One is tempted to identify these related groups as at least Siouan-speaking and possibly including some division of Assiniboine themselves. These people seem to have had a material culture that was typically Woodland in that they buried the dead in log-covered tombs in burial mounds, made grit-tempered cord-marked pottery, manufactured a wide variety of chipped stone artifacts, and had a semi-nomadic subsistence based upon hunting. These hunting patterns varied with environment; those to the east being dependent upon forest animals and those to the west on buffalo, but this difference does not seem to be reflected in their material culture, which throughout the area was extremely similar. In eastern Manitoba the Selkirk Focus, which appears to have been the material culture of the Cree, replaced the Manitoba Focus, i.e., the Assiniboine, during the 14th century. There was considerable inter-influencing between the Cree and Assiniboine material culture after the 1400's, but both maintained most of their distinctive traits. The Cree made mainly fabric-impressed pottery, while the Assiniboine continued to cord-mark theirs, and Cree burials were usually flexed in pits, while those of the Assiniboine occurred in mounds. Of course, the shift of the Assiniboine to the Plains in slightly later times

<sup>253</sup> McKern, 1937; Ritchie, 1955.

<sup>254</sup> Webb and Snow, 1945; Spaulding.

meant that they became heavily dependent for their subsistence on buffalo hunting, while the Cree maintained a forest-hunting economy. This archaeological reconstruction of Assiniboine and Cree prehistories is not radically different from that brought forth by the ethnologist. However, there are some differences, and I shall present them. Both the ethnological and archaeological reconstructions see the Cree as replacing the Assiniboine in eastern Manitoba relatively recently. Both Jenness<sup>255</sup> and Lowie<sup>256</sup> would see this replacement as taking place in late 17th century, while Kroeber,<sup>257</sup> though never stating the time period categorically, would have it as taking place only slightly earlier. The archaeological data would indicate that the shift had taken place at least by A.D. 1400. Again both reconstructions would have the Cree moving in from the north or northeast. However, the ethnologists would have the Assiniboine moving in from the Woodlands (of Minnesota) fairly recently. Jenness sees the Assiniboine in the Lake of the Woods and Lake Nipigon areas (and inferentially in southeast Manitoba) in the 17th century, then shifting, owing to White influence, to western Manitoba in the 18th century and into Saskatchewan by the middle of the same century.<sup>258</sup> Wissler, Kroeber, and Lowie give a similar view. The archaeological picture is at some variance with the above reconstructions. First of all, the archaeological picture indicates that the Assiniboine were over all of southern Manitoba and perhaps southern Saskatchewan and northern Minnesota by A.D. 1000. Furthermore, the hints of culture continuity leading up to the Manitoba Focus may mean that this was the general territory of the Assiniboine or proto-Assiniboine for a much greater length of time (5,000 years?). The latest possible major population shift would have taken place in the 14th century with the Cree spreading into southeast Manitoba, and the Assiniboine confined to the western part of their original territory. Such movements were in no way connected with White influence, directly or indirectly.

Having summed up the archaeological sequence of Manitoba, its possible significance in New World prehistory, and its implications in terms of reconstruction of histories of certain tribal groups, the question now arises as to what more should be done. As is perhaps obvious from this monograph, the archaeological picture for southeastern Manitoba is far from complete. One thing that must be done is the excavation of more pure sites of each sequential phase or focus so that more complete reconstructions can be undertaken. A crucial part of this work should be the uncovering of large numbers of examples of the burial complexes of each focus. This not only would yield a fuller cultural inventory for each but would allow for physical anthropological studies (including the data already available) that could aid establishing the physical types of these ancient peoples, changes in physical types, and movements of populations. Though our chronological framework is based on stratigraphy, more stratified sites should be tested so that definite evidence of continuities or discontinuities in the early part of the sequence would be seen. Some attempt also should be made to get more exact dates or time estimates for the various parts of the sequence. Next, the area of investigation should be greatly expanded so that more detailed comparisons could be undertaken with other regions.

<sup>255</sup> Jenness, 1932.

<sup>256</sup> Lowie, 1910.

<sup>257</sup> Kroeber, 1939.

<sup>258</sup> Jenness, 1932.

Such a program cannot be quickly or completely done by one archæologist alone. Co-operation between the archæologist or, better yet, a series of archæologists employed by a number of local institutions, amateur archæologists, and interested laymen could make for relatively complete archæological reconnaissances and thorough excavations. It is hoped that during the further excavations and analysis of the archæological materials the anthropologist can work in co-operation with ethnologists, historians, geologists, physicists, botanists, zoologists, agronomists, and a host of other specialists. Such interdisciplinary co-operation can greatly enhance studies of prehistory. If such a program can be carried out, then we shall be able, eventually, to obtain a fairly complete story of the prehistory of Manitoba. It is hoped that this paper is but the first step in that direction.



Appendix  
 ARTIFACT DESCRIPTIONS  
 PART I  
 PROJECTILE POINTS

Before embarking upon the description of the 116 projectile points found in the excavations of southeastern Manitoba, I believe a few definitions are necessary.<sup>259</sup> A *projectile point* is considered to be a pointed man-made object (artifact) of stone, bone, shell, wood, or metal that can be hafted to a shaft (of an arrow, dart, or lance) to facilitate penetration. All projectile points have tips, bodies, bases (See Figure 14), and sometimes stems.

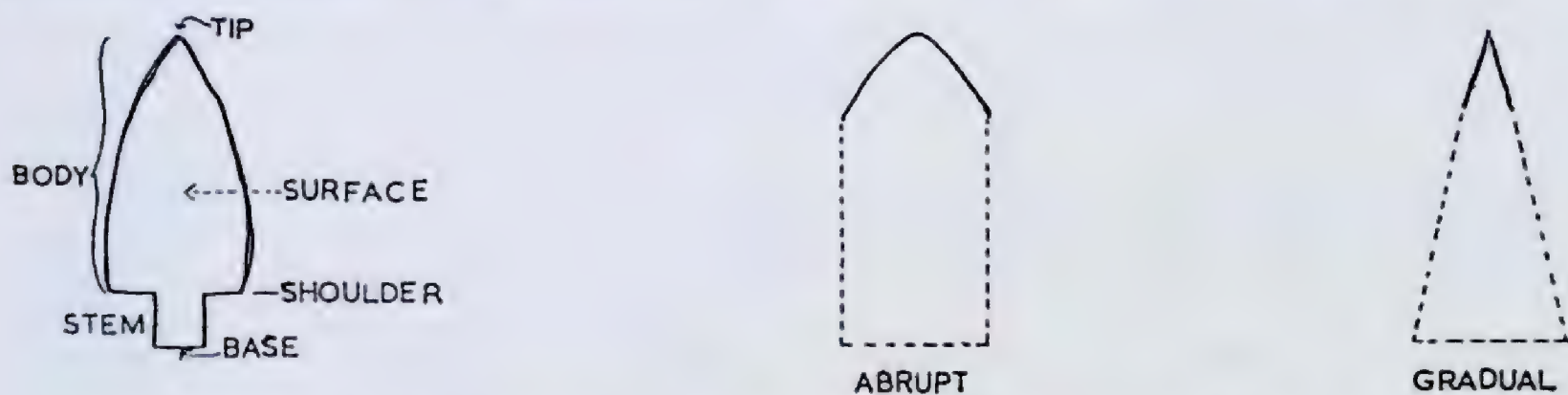


Figure 14. Main part of projectile points and kinds of tips.

The *tip* is the part of the projectile point that has been sharpened for penetration. Tips may be *abrupt* or *gradual* (See Figure 14). The *base* is at the opposite end from the tip and rests against a portion of the distal end of the hafted shaft. Bases may be *concave*, *convex*, *pointed*, *straight*, *indented*, or *notched* (See Figure 15).



Figure 15. Kinds of projectile point bases.

The *body* is the main part of the projectile point between the tip and base or stem (See Figure 14). The flattened wider part of the body is called the *surface* while the sharp portion at the junction of the surfaces is

<sup>259</sup> Krieger, 1954, p. 530.

called the *edge* (See Figure 16). Surfaces may be *fluted*, *flat*, *convex*, *bevelled* and may bear *primary flake scars*, *percussion flaking*, *pressure flaking*, or *ripple flaking* (See Figure 18).

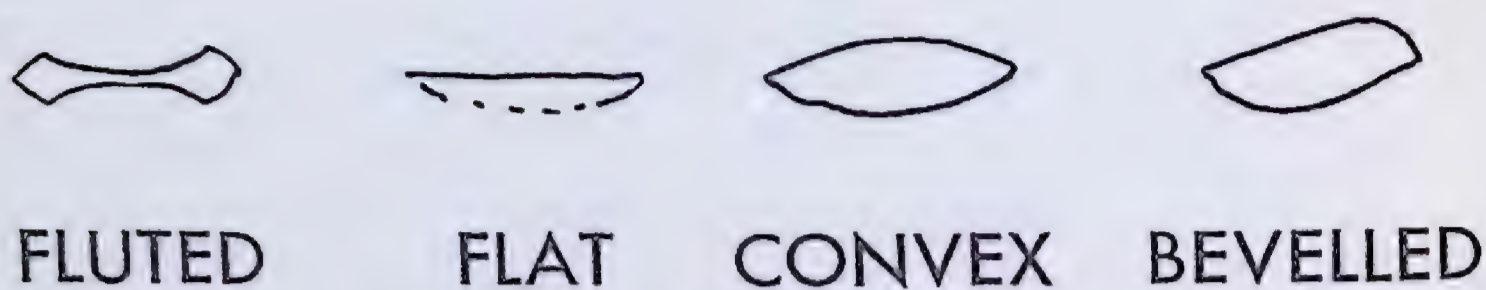


Figure 16. Point cross-sections.

Body forms vary considerably and may have *straight*, *convex*, *lanceolate*, *parallel*, *concave* or *concave blending into convex* edges (See Figure 17).

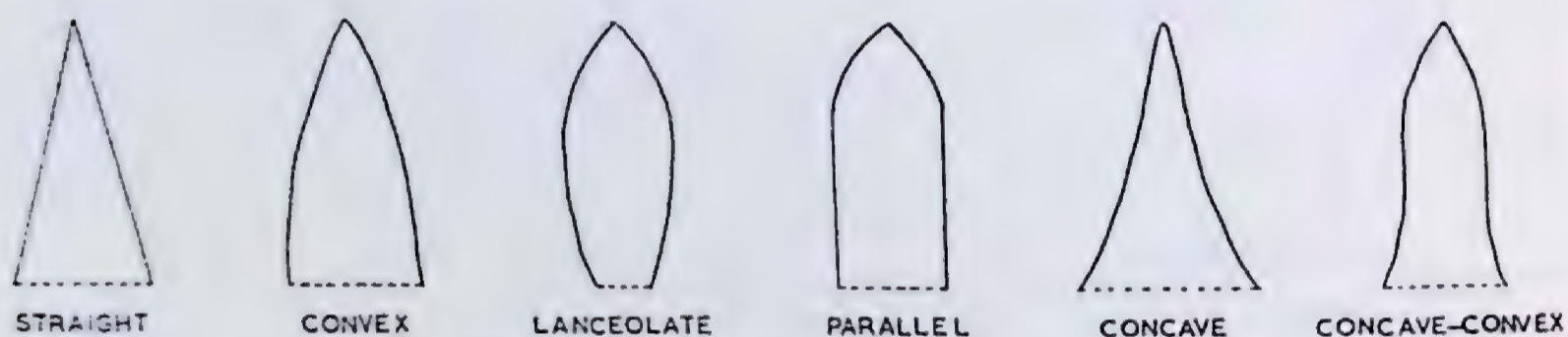


Figure 17. Body forms of projectile points.

The edges themselves may show evidence of *serrations*, *retouching* or *pressure flaking*, *grinding*, or *percussion flaking* (See Figure 18).

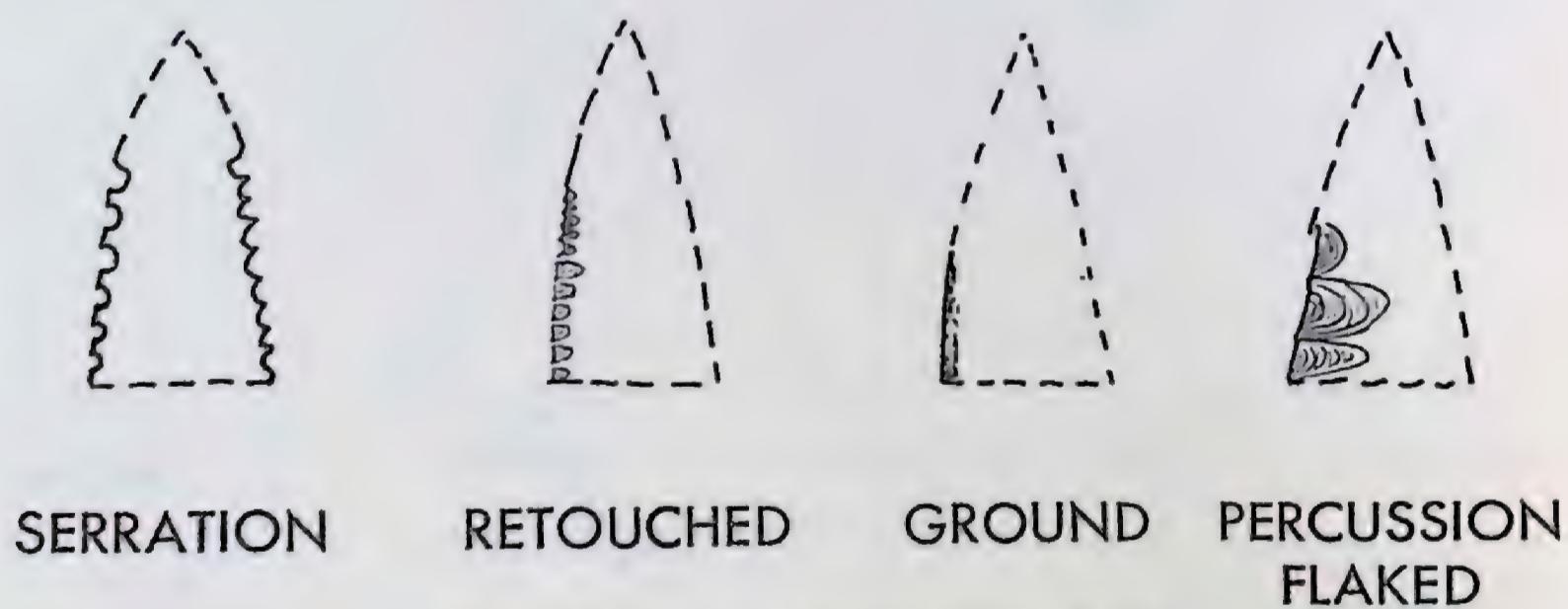


Figure 18. Kinds of projectile point edges.

Often the edges of the body adjacent to the base or the base itself are notched to facilitate hafting. The various kinds of notches are called

*side-notched, corner-notched, corner-removed, side-removed, and basal-notched.* (See Figure 19).

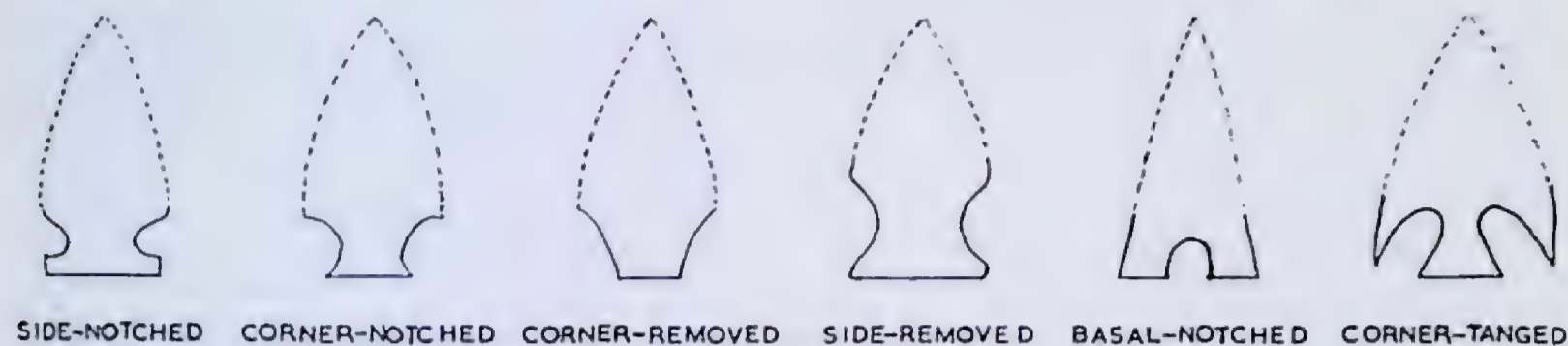


Figure 19. Kinds of projectile point notches.

Although corner notches are sometimes narrow, often they are wide. Occasionally the long narrow pointed portion of the body is left when the corner notches are removed. These pointed portions are called corner tangs (See Figure 19).

Notchings or the removal of portions of the projectile point at the junction of the base and the body usually produce a stem that facilitates hafting.

Stems may be *straight, expanding, contracting, or pointed*, and the bases of the stems may have the usual variations mentioned previously (See Figure 20). The junction of the *stem and body* is called the *shoulder*. (See Figure 14).

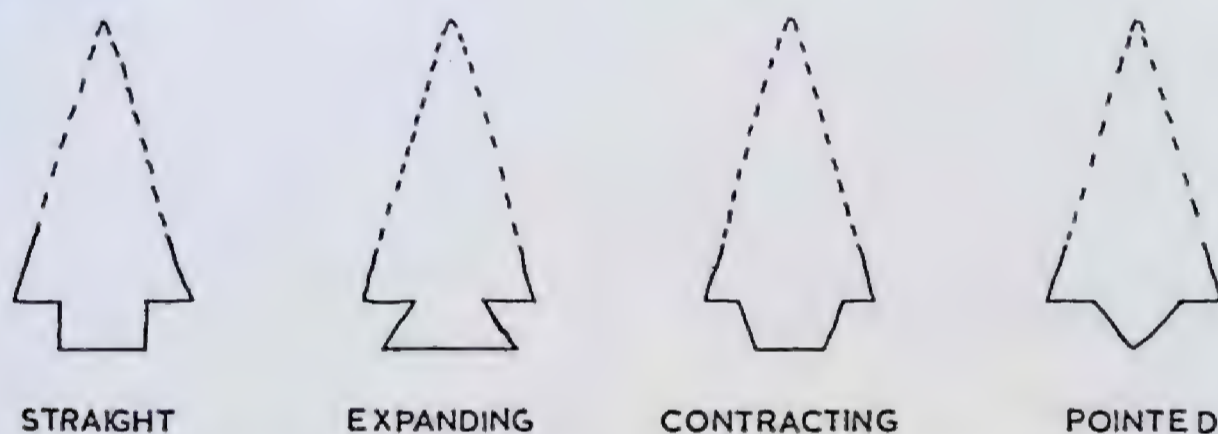


Figure 20. Varieties of projectile point stems.

Projectile points may also vary in thickness (from surface to surface), in length (from the tip to the centre of the base), and in width (between the furthestmost portions of the lateral edges). The ranges and dimensions in this report have been measured in millimetres.

All the above-mentioned variations in the parts of projectile points plus the range in size of the various component parts are considered to be projectile point features. These features can be combined in a large number of ways to produce a large number of rather different-looking projectile points.

The archæologist usually groups certain of these not too different-looking projectile points into a type. This is done for three reasons: (1) That he may be able to conveniently describe the projectile points uncovered in excavation; (2) That he may establish types of projectile points to serve as time-markers or space-markers; i.e., projectile point

types are used as a kind of man-made fossil index; (3) That as the types are thought in some degree to reflect æsthetic and utilitarian standards of value, which operated on the minds of the makers as cultural compulsives, they therefore possess some genuine measure of intrinsic validity. For these reasons *a type (of projectile point) is defined as a class or group (of projectile points) having inter-related similar features that have temporal or spatial significance.*<sup>260</sup>

The establishment of types is based upon a whole series of trials or experiments. In the actual analysis, first the projectile points found in the Lockport excavations were laid out on a table in horizontal rows corresponding to excavation levels. Next, the projectile points of each level were divided into groups, each of which had distinctive projectile point features. These groupings were called trial types. Then the trial types from each level were compared. Those that showed different distributions or proportions, level by level, were continued as trial types, and those that had more or less similar distributions, as well as some similar features, were lumped together into new trial types. Next, a similar process was applied to the other sites, and the trial types of each level of each site were then compared with each other. From these comparisons certain of the trial types were found to have temporal significance. Then, these trial types with temporal significance were compared with types from other areas to determine their spatial significance. Thus the trial types with temporal and spatial significance became types.

Once the types were determined, it became possible to discern the sequence and trends of projectile points in the deep stratified Lockport site. Assuming that layers or levels with similar projectile point types are of roughly the same time period, one also was able by comparison with the Lockport sequence to align other sites or the levels of other sites and the Lockport levels in their relative chronological order.

This sequence of all projectile point types from all components may be seen in the following table.

<sup>260</sup> Ritchie and MacNeish, 1949.

Table 2. Distribution of projectile point types in the excavated sites in southeast Manitoba.

| Foci                                           | Sites                                | Levels | Totals | Nutmik Concave | McKean Lanceolate | Sturgeon Triangular | Winnipeg Ovoid | Parkdale Eared | Larter Tanged | Anderson Corner-notched | Lockport Stemmed | Whiteshell Side-notched | Eastern Triangular | Plains Side-notched | Prairie Side-notched | Selkirk Side-notched |
|------------------------------------------------|--------------------------------------|--------|--------|----------------|-------------------|---------------------|----------------|----------------|---------------|-------------------------|------------------|-------------------------|--------------------|---------------------|----------------------|----------------------|
| SELKIRK . . . .                                | Alexander's Pt. . . . .              | 1-3    | 3      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | 1                  | ..                  | 1                    | 1                    |
|                                                | Lockport (1951) . . . . .            | 1-2    | 5      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | 1                       | 2                  | ..                  | ..                   | 1                    |
|                                                | Waulkinen . . . . .                  | 1-2    | 7      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | 1                       | 3                  | 1                   | ..                   | 2                    |
|                                                | Sturgeon Falls . . . . .             | 1-2    | 5      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | 2                  | ..                  | ..                   | 2                    |
|                                                | Cemetery Pt. . . . .                 | 1      | 9      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | 4                  | ..                  | ..                   | 3                    |
|                                                | Total points for the focus . . . . . |        | 29     | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | 1                  | 12                  | 3                    | 3                    |
| Percentages of point types for focus . . . . . |                                      | 100    | ..     | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | .03                     | .42                | .10                 | .10                  | .35                  |
| MANITOBA . . . . .                             | Lockport (1947) . . . . .            | 1      | 1      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | ..                 | ..                  | ..                   | 1                    |
|                                                | Lockport (1951) . . . . .            | 5      | 6      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | 4                  | 1                   | 1                    | 1                    |
|                                                | Lockport (1947) . . . . .            | 2      | 2      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | 1                  | 1                   | ..                   | ..                   |
|                                                | Lockport (1947) . . . . .            | 3      | 1      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | ..                 | ..                  | 1                    | ..                   |
|                                                | Lockport (1951) . . . . .            | 6      | 5      | ..             | ..                | ..                  | ..             | ..             | ..            | 1                       | ..               | ..                      | 2                  | 2                   | ..                   | ..                   |
|                                                | Rosser Mound . . . . .               | ..     | 2      | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | ..                      | 1                  | 2                   | ..                   | ..                   |
| Cemetery Pt. . . . .                           | 2                                    | 3      | ..     | ..             | ..                | ..                  | ..             | ..             | ..            | ..                      | ..               | 1                       | 2                  | ..                  | ..                   |                      |
| Total points for the focus . . . . .           |                                      | 20     | ..     | ..             | ..                | ..                  | ..             | ..             | ..            | 1                       | ..               | 2                       | 11                 | 2                   | 4                    | ..                   |
| Percentages of point types for focus . . . . . |                                      | 100    | ..     | ..             | ..                | ..                  | ..             | ..             | ..            | .05                     | ..               | .10                     | .55                | .10                 | .20                  | ..                   |

Table 2. Distribution of projectile point types in the excavated sites in southeast Manitoba—Concluded

| Foci        | Sites                                                                     | Levels | Totals    | Nutimik Concave | McKean Lanceolate | Sturgeon Triangular | Winnipeg Ovoid | Parkdale Eared | Larter Tanged | Anderson Corner-notched | Lockport Stemmed | Whitshell Side-notched | Eastern Triangular | Plains Side-notched | Prairie Side-notched | Selkirk Side-notched |
|-------------|---------------------------------------------------------------------------|--------|-----------|-----------------|-------------------|---------------------|----------------|----------------|---------------|-------------------------|------------------|------------------------|--------------------|---------------------|----------------------|----------------------|
| NUTIMIK.... | Lockport (1947).....                                                      | 4      | 2         | .....           | .....             | .....               | .....          | .....          | .....         | .....                   | 1                | 1                      | .....              | .....               | .....                | .....                |
|             | Lockport (1951).....                                                      | 7      | 1         | .....           | .....             | .....               | .....          | .....          | .....         | 1                       | .....            | 5                      | .....              | .....               | .....                | .....                |
|             | Cemetery Pt.....                                                          | 3      | 11        | .....           | .....             | .....               | .....          | .....          | .....         | 6                       | .....            | .....                  | .....              | .....               | .....                | .....                |
|             | Lockport (1951).....                                                      | 8      | 2         | .....           | .....             | .....               | .....          | .....          | .....         | 2                       | .....            | .....                  | .....              | .....               | .....                | .....                |
|             | Total points for the focus.....<br>Percentages of point types for focus.. | .....  | 16<br>100 | .....           | .....             | .....               | .....          | .....          | .....         | .....                   | .56              | .06                    | .38                | .....               | .....                | .....                |
| ANDERSON... | Lockport (1951).....                                                      | 9      | 2         | .....           | .....             | .....               | .....          | .....          | .....         | 1                       | 1                | .....                  | .....              | .....               | .....                | .....                |
|             | Anderson.....                                                             | 2      | 2         | .....           | .....             | .....               | .....          | .....          | .....         | 2                       | .....            | .....                  | .....              | .....               | .....                | .....                |
|             | Total points for the focus.....<br>Percentages of point types for focus.. | .....  | 4<br>100  | .....           | .....             | .....               | .....          | .....          | .....         | .75                     | .25              | .....                  | .....              | .....               | .....                | .....                |
| LARTER..... | Lockport (1951).....                                                      | 11     | 1         | .....           | .....             | .....               | .....          | .....          | .....         | 1                       | .....            | .....                  | .....              | .....               | .....                | .....                |
|             | Larter.....                                                               | 2      | 12        | .....           | .....             | .....               | .....          | .....          | .....         | 1                       | .....            | .....                  | .....              | .....               | .....                | .....                |
|             | Larter.....                                                               | 3      | 14        | .....           | .....             | .....               | .....          | .....          | .....         | 1                       | .....            | .....                  | .....              | .....               | .....                | .....                |
|             | Larter.....                                                               | 4      | 14        | .....           | .....             | .....               | .....          | .....          | .....         | 3                       | .....            | .....                  | .....              | .....               | .....                | .....                |
|             | Total points for the focus.....<br>Percentages of point types for focus.. | .....  | 41<br>100 | .....           | .....             | .....               | .....          | .....          | .....         | .....                   | .15              | .....                  | .....              | .....               | .....                | .....                |

| WHITESHELL | Cemetery Pt.                              | 1   | 2   | 3   | 4 | 5 | 6 | 1   | 2   | 3   | 4   | 7   | 19  | 2   | 9   | 23  | 5   | 7   | 10  |
|------------|-------------------------------------------|-----|-----|-----|---|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                                           |     |     |     |   |   |   |     |     |     |     |     |     |     |     |     |     |     |     |
|            | Cemetery Pt.                              | 1   | 2   | 3   | 4 | 5 | 6 | 1   | 2   | 3   | 4   | 7   | 19  | 2   | 9   | 23  | 5   | 7   | 10  |
|            | Cemetery Pt.                              | 3   |     |     |   |   |   |     |     |     |     |     |     |     |     |     |     |     |     |
|            | Cemetery Pt.                              | 2   |     |     |   |   |   |     |     |     |     |     |     |     |     |     |     |     |     |
|            | Total points for the focus.....           | 6   | 2   | 6   |   |   |   | 1   | 2   | 3   | 4   | 7   | 19  | 2   | 9   | 23  | 5   | 7   | 10  |
|            | Percentages of point types for focus..... | 100 | .38 | 100 |   |   |   | .12 | .50 | .50 | .40 | .37 | .16 | .11 | .18 | .26 | .15 | .14 | .10 |
|            | GRAND TOTALS.....                         | 116 | 2   | 116 |   |   |   | 11  | 6   | 11  | 6   | 11  | 116 | 2   | 11  | 116 | 6   | 11  | 116 |

Now let us examine this sequence (*See Table 1*). The three earliest types are un-notched points (McKean Lanceolate, Nutimik Concave, and Sturgeon Triangular). This temporal priority of un-notched points is in agreement with the general trend throughout the Great Plains.<sup>261</sup> However, there is one main difference between the projectile points found in the Lake Agassiz Basin of southeastern Manitoba and those found in the rest of the Plains and even western Manitoba. The difference is that none of the so-called Early Man types of projectile points (such as Plainview, Folsom, Eden, Clovis, Sandia, and Scottsbluff)<sup>262</sup> occur in either excavation in the survey of the National Museum, or in the numerous private collections in southeast Manitoba. In fact, the only early-looking points from all of eastern Manitoba are a few Angostura-like points from Lake Jessica, which is well east of the Lake Agassiz Basin. I have taken this absence of Early Man points as indicating that the waters of Lake Agassiz did not recede and southeastern Manitoba did not become inhabitable until after these Early Man points had gone out of style some 5,000 years ago.

The earliest Manitoba projectile points, particularly McKean Lanceolate, are common and distinctive throughout the Great Plains and the western United States. Their lack of notches, their shape, and the occasional grindings on the edges near the base may indicate that they were some sort of development from one or more of the Early Man types. Carbon 14 dates for this type suggest that these typologically old-style points are contemporaneous with a whole series of notched and stemmed types in the Eastern Woodland which characterize the Eastern Archaic and are found in the Southern Plains, the Plateau area, the Southwest, and perhaps the Northern Boreal Forest. As McKean Lanceolate is dying out, new styles of notched types move into southeastern Manitoba as well as the rest of the northern Plains. Exactly which areas or area they diffused from is not discernible at our present stage of investigation. The presence of these notched points and flint drills, hafted or notched end-scrapers, and, occasionally, ground stone artifacts, makes this horizon similar to the late phases of the Eastern Archaic. Perhaps one is justified in classifying it as the Northern Plains Archaic. However, the relative scarcity of ground stone, the buffalo hunting subsistence, and the predominance of narrowly corner-notched or corner-tanged points give this horizon a distinctive mien.

The following two foci see the predominance of large wide corner-notched points. In southeastern Manitoba they are associated with pottery, while farther west pottery may be lacking, and to the east they occur in the Middle Woodland period. The predominance of broad corner-notched points seems to be a good time-marker from the Atlantic Ocean to the Rockies, in the northern and eastern United States, and in adjacent parts of Canada. Large side-notched and contracting stemmed points also occur in this time period. The size of all the projectile points just mentioned above indicates they were hafted to the shafts of spears, lances, or darts.

The next horizon in southeast Manitoba sees a radical shift in that most of the points are small, triangular, with or without side-notches, and were probably hafted to arrow shafts. A similar shift seems to have taken place all over North America east of the Rockies at roughly the

<sup>261</sup> Krieger.

<sup>262</sup> Wormington, 1949.



same period (perhaps between A.D. 500 and A.D. 1100). Why or how this seemingly radical and rapid shift took place is not clearly understood. The bow and arrow were known and in wide use in the Old World from near the end of the last glaciation (11,000 years ago).<sup>263</sup> They seem to have been used since Cape Denbigh times (3,000 to 9,000 years ago) in the New World Arctic.<sup>264</sup> Also, from Cordoba Cave and Tularosa and the southwest of the United States a few fragments of arrows were found in the earliest levels 2,000 to 3,000 years ago,<sup>265</sup> and there are hints that they were known in the Brewerton Focus of New York site some 4,000 years ago.<sup>266</sup> In the light of these facts it is surprising that this bow and arrow complex did not gain dominance until so late in North America as a whole. The fact, however, remains that by White-contact times the bow and arrow was used by most Indians of North America, and, as in southeast Manitoba, small triangular points or variants thereof extended up into the historic or proto-historic period.

As may be seen, the sample of projectile points from excavation, only 116, is rather inadequate. Further excavation should supplement this sample and further define the types and perhaps even delineate new types. However, since study of more than 500 points from collections of this region revealed few projectile point types not found in our excavation, it would seem that any new redefining will not yield many radically different projectile point types.

#### PROJECTILE POINT TYPES

**Nutimik Concave** (Plate VI, No. 17). Only two of these points were found, both in Level 5 of the Cemetery Point site. However, about 30 exist in private collections from the Lamprey Falls area.

**Form and Dimensions:** The lateral edges are slightly convex and taper from the maximum width at the base to gradual tips. Both projectile points found in excavation had their tips snapped off, but projections from their sides would indicate they were between 70 and 80 mm. in length. Those from amateur collections are of about this length. Bases are concave, and the depth of the concavity is 2 to 3 mm. The maximum width at the base is 31 to 28 mm., respectively, while the maximum thickness near the mid-point is 6 mm. and 4 mm. respectively.

**Chipping Technique:** Pressure flaking is usually found on both surfaces and tends to run diagonally across the main axis of the points. It, however, is not true ripple flaking in that it is too irregular and poorly done. All edges have delicate retouching along them, and a few of those in private collections have small amounts of grinding on the lateral edges just above the base.

**Diagnostics of the Type:** Long narrow triangular points with concave bases.

<sup>263</sup> Braidwood.

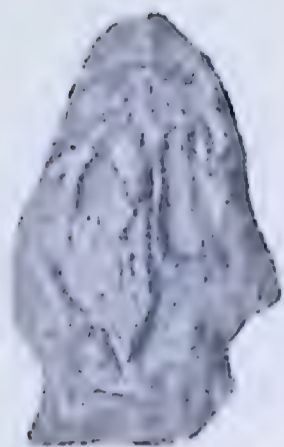
<sup>264</sup> Giddings, 1951.

<sup>265</sup> Martin, *et al.*, 1952, pp. 341-342.

<sup>266</sup> Ritchie, 1940, Plate XIII, 42-54; Plate XV, 1-13; and Plate XXV, 39-40.

## PLATE VI. Manitoba Projectile Points.

- 1-3. Anderson Corner-notched projectile point types.
- 4, 5. Lockport Stemmed projectile point types.
- 6-8. Parkdale Eared projectile point types.
- 9-11. Larter Tanged projectile point types.
- 12, 13. Winnipeg Ovoid projectile point types.
- 14-16. Sturgeon Triangular projectile point types.
- 17. Nutimik Concave projectile point types.
- 18-20. McKean Lanceolate projectile point types.



1



2



3



4



5



6



7



8



9



10



11



12



13



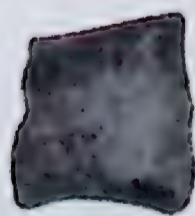
14



15



16



17



18



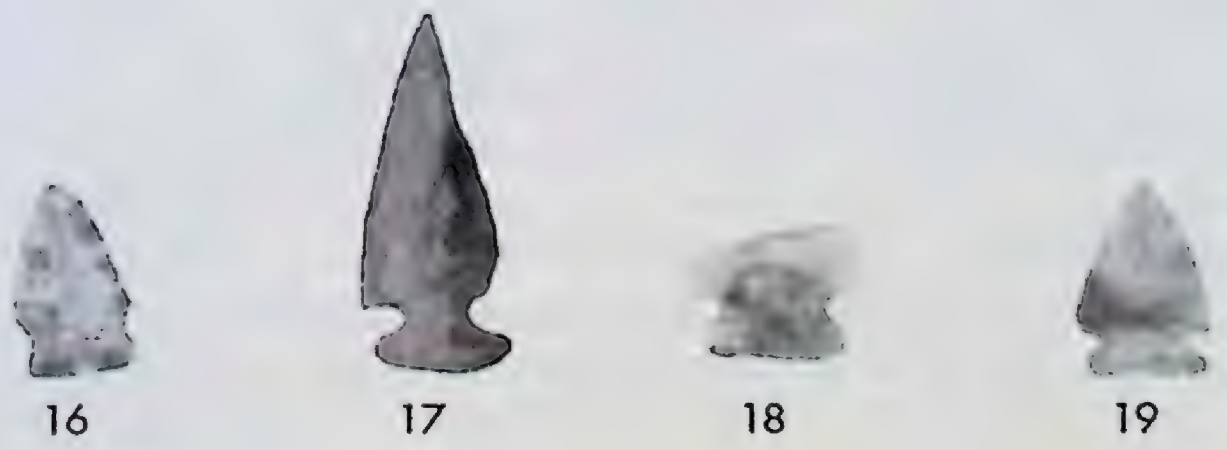
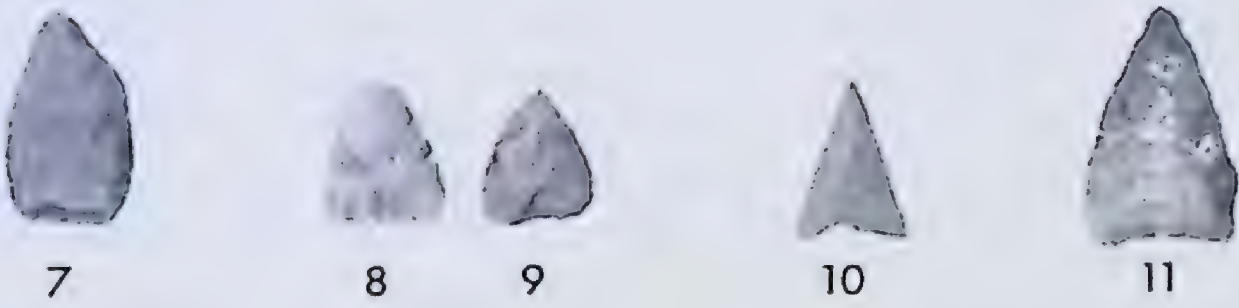
19



20

## PLATE VII. Manitoba Projectile Points.

- 1-3. Selkirk Side-notched projectile point types.
- 4-6. Plain Side-notched projectile point types.
- 7-11. Eastern Triangular projectile point types.
- 12-15. Prairie Side-notched projectile point types.
- 16-19. Whiteshell Side-notched projectile point types.



**Temporal and Geographical Range:** On the basis of present excavations, points of this type occur in the Whiteshell Focus at Cemetery Point and in the lower levels of the McKean site.<sup>267</sup> Surface collections, however, indicate they occur over most of southern Manitoba, but their temporal position for that area is not established.

**Relationships:** In a vague way these points are similar to some that have been classified as Plainview and others as Brown's Valley points. It is possible that these Nutimik Concave points were derivatives from the above-mentioned Early Man types.

**McKean Lanceolate** (Plate VI, Nos. 18 to 20). Three occurred at Cemetery Point site, and three were found in the excavation of the Larter site, but about ten have been found on the surface both at that site and at Lockport.

**Form and Dimensions:** The edges are slightly concave to straight just above the base to the mid-point. From the mid-point to the tip they are convex, and the tips are abrupt. Bases are narrow and concave. Maximum widths, usually at the mid-point, are 18 and 25 mm. One point has maximum width near the base. Length ranges from 31 to 40 mm., though fragments from the surface indicate a few may be 60 mm. Nearly all are about 8 mm. thick.

**Chipping Technique:** Pressure flaking is usually found on the surface and generally radiates from the main length axis. Most of it is rather poorly done, but one point with the chipping well done shows collateral flaking. Edges usually have fine retouching, and on the edges just above the base usually some grinding.

**Diagnostics of the Type:** Short narrow points with concavo-convex<sup>268</sup> edges and with concave bases that have grinding on the edges of lateral sides adjacent to the base.

**Temporal Range:** Pre-ceramic times in the Red River valley and southeastern Manitoba. Carbon 14 dates in the northern Plains suggest a date of 3,500 to 5,000 years old.

**Geographical Range:** Occurs over much of the northern Plains and is the predominant type in Pictograph Cave of Montana,<sup>269</sup> Signal Butte IA of Nebraska,<sup>270</sup> and the Limestone Bath Focus of South Dakota,<sup>271</sup> the McKean site of Wyoming,<sup>272</sup> a number of smaller sites in Wyoming, and the Thunder Creek Focus of the Mortlach site in Saskatchewan.<sup>273</sup>

**Relationships:** The general similarity of form of McKean points to certain Early Man points (such as Angostura points) has been noted. Whether theirs is a genetic relationship remains to be

<sup>267</sup> Mulloy, 1954, Fig. 4, No. 10.

<sup>268</sup> Mulloy, 1952.

<sup>269</sup> Mulloy, 1952.

<sup>270</sup> Strong, 1935.

<sup>271</sup> Hughes, 1949.

<sup>272</sup> Mulloy, 1954.

<sup>273</sup> Wettlaufer, 1956.

established. Lister<sup>274</sup> and Wheeler<sup>275</sup> have pointed out the similarities in some points from Texas,<sup>276</sup> points of the San José complex,<sup>277</sup> Pinto Basin points in California, Utah, and Nevada,<sup>278</sup> Hanna points in Wyoming,<sup>279</sup> and McKean Lanceolate. Perhaps future studies of these types with respect to their chronological and spatial positions will allow for the combining of some of them into one type. Certainly it is about time that New World archæologists began to "lump" some of their types rather than "split" them.

**Sturgeon Triangular** (Plate VI, Nos. 14 to 16). Only one point of this type occurred in excavation at Cemetery Point and ten at Larter, but surface collections from Lockport and Larter, as well as other sites, have yielded over 200. There is a considerable range in size of these points or blades, and, I believe, also a wide range in function.

**Form and Dimensions:** Points range from 36 to 70 mm. in length, from 23 to 43 mm. in width, and from 6 to 12 mm. in thickness. The greater number have straight or slightly convex bases and more or less parallel convex edges that gradually taper to a point.

**Chipping Technique:** The surface usually shows irregular percussion or pressure flaking, and the edges show pressure flaking.

**Temporal Range:** Whiteshell Focus, Larter Focus, and earliest levels of Lockport.

**Geographical Range:** Southern Manitoba.

**Relationships:** Very general and in some cases may be quarry blanks.

**Winnipeg Ovoid** (Plate VI, Nos. 12 and 13). Eleven of these points were found at the Larter site. They are a general type and have been collected from numerous areas all over Manitoba. It has been suggested that they are quarry blanks, but it is also possible that they are completed projectile points.

**Form and Dimensions:** All these points have concave edges that taper to a gradual point on one end and on the other end gradate into a convex base with no definite break in contour differentiating the bases from the sides. Lengths range from 35 to 78 mm., widths from 12 to 40 mm., and maximum thicknesses from 5 to 60 mm.

**Chipping Techniques:** Surfaces bear irregular percussion-flake scars, and the edges may or may not have pressure flaking on them.

**Diagnostics of the Type:** Projectile points tear-drop shape in outline, not longer than 80 mm.

<sup>274</sup> Lister, 1953.

<sup>275</sup> Wheeler, 1954.

<sup>276</sup> Suhm and Krieger, 1954.

<sup>277</sup> K. Bryan and J. H. Toulouse, 1943.

<sup>278</sup> E. W. and W. H. Campbell, 1935.

<sup>279</sup> Wheeler, 1954.

**Temporal and Geographical Range:** These occurred in the Larter site, but some of the round-base bifacial blades in later horizons might at some future date be lumped with this early type. This point type is of such a general form that it is difficult to make definitive statements about its temporal or geographical relationships.

**Relationships:** Too general to state.

**Parkdale Eared** (Plate VI, Nos. 6 to 8). Four were found in the excavation of the Larter site, though many were on the surface.

**Form and Dimensions:** This type has convex edges and concave bases. Just above the base are wide, round side-notches, and the edges of the stems between the notches and base are excurvate and round into the base. The rounded stems give the base or basal corners an eared appearance.

The wider portion of the points (between 18 and 22 mm.) is usually at the ears at the base. Lengths range from 25 to 40 mm. They are rather thick, ranging from 6 to 10 mm.

**Chipping Technique:** Surfaces bear rude percussion flaking scars with some pressure flaking along the edges.

**Diagnostics of the Type:** Medium length narrow points with side notches and incurvate bases which form rounded ears at the junction of base and sides.

**Temporal Range:** These are confined to the Larter Focus and are perhaps 2,000 to 3,000 years old.

**Geographical Range:** The points seem to have a wide range: over the Northern Plains appearing in the McKean site in Wyoming,<sup>250</sup> in Signal Butte I in Nebraska, and in the Sandy Creek and Besant horizons in southern Saskatchewan.<sup>251</sup>

**Relationships:** The type appears to be widespread over the Plains in late pre-pottery times. The type certainly resembles one of the diagnostic types of the Brewerton Focus of the Laurentian Aspect in the Northeast<sup>252</sup> of the late pre-pottery period as well as some of the points of the Lockhart River complex in the Northwest Territories<sup>253</sup> and might be related. The type may well be found to be a good time-marker for a large area, and a study of these points to discern relationships would be worth while.

**Larter Tanged** (Plate VI, Nos. 9 to 11). Seven points of this type were found during the excavation of the Larter site, though well over a hundred have been collected from the surface of that site.

**Form and Dimensions:** The edges are slightly convex or straight and taper sharply to a point. The bases are slightly convex, straight, or very slightly concave. Stems are expanding. Shoulders are

<sup>250</sup> Mulloy, 1954, Fig. 4, upper No. 43, lower 35-36.

<sup>251</sup> Strong, 1935, Plate 25, left part, Nos. d and e; Wettlaufer, 1956.

<sup>252</sup> Ritchie, 1940, Plate XIII, Nos. 29-31, Nos. 40-46.

<sup>253</sup> MacNeish, 1950, Plate III, Nos. 1 and 5.



at an oblique angle to the base-to-tip axis and are also incurvate, thereby forming a tang. The notches at the corner are round or oval.

The maximum width of 20 to 26 mm. is at the tips of the tangs at the shoulder. Maximum length is only a little greater (1 to 3 mm.) than maximum width, which ranges from 25 to 32 mm. Maximum thickness ranges between 5 and 10 mm.

**Chipping Technique:** Surfaces bear evidence of pressure flaking, and edges show retouching.

**Diagnostics of the Type:** Short wide points with corner notches and a short tang at the shoulders.

**Temporal Range:** Larter Focus, 2,500 to 3,500 years ago.

**Geographical Range:** This appears in Pictograph Cave II, the Red Lodge site in Montana,<sup>284</sup> in the upper levels of the McKean site,<sup>285</sup> in Signal Butte II,<sup>286</sup> and in the Pelican Lake horizon in southern Saskatchewan.<sup>287</sup>

**Relationships:** The type is probably ancestral to the Anderson Corner-notched type. It also seems to be related to the Hanna type of Wyoming.

**Anderson Corner-notched** (Plate VI, Nos. 1 to 3). Nineteen of these points have been found in excavation.

**Form and Dimensions:** These points have convex edges that taper to the tip. The bases of the stems are usually straight but also are very slightly convex. The shoulders are at right angles to the main axis of the point and are more or less straight but very definitely lack a tang. The stems are expanding toward the base, and the notch is more or less oval.

The wider portions of the points are at the shoulder ranging from 20 to 40 mm. with the majority being about 25 mm. Length ranges from 30 to 68 mm., the average being about 40 mm. Thickness averages about 8 mm.

**Chipping Technique:** Most points bear evidence of pressure flaking radiating from the main axis toward the edges, which have fine retouching.

**Diagnostics of the Type:** Long narrow points with corners notched at right angles to the main axis of the point, on expanding stem and a straight base.

**Temporal Range:** These points appear in the Anderson, Nutimik, and Larter foci.

**Geographical Range:** Possibly the same type as appears in Middle Woodland in the eastern United States and in pre-pottery and Woodland horizons of the Plains.

<sup>284</sup> Mulloy, 1952.

<sup>285</sup> Mulloy, 1954, Fig. 4, lower No. 4, 21, and 25.

<sup>286</sup> Strong, 1935, Plate 24, right-hand part e.

<sup>287</sup> Wettlaufer, 1956.

Relationships: These points are probably related to the Larter Tanged type and possibly derived therefrom and are similar to the dominant point form of the eastern Middle Woodland times.

**Lockport Stemmed** (Plate VI, Nos. 4 and 5). Represented by only two specimens from the Lockport site.

**Form and Dimensions:** The edges of the blades are convex and gradually taper to a point. The short base of the stems is roughly straight. The points have a wide, slightly contracting stem with straight edges, and the shoulders, which are poorly defined, are roughly at right angles to the main axis of the blades. The maximum width is at the shoulder and is about 20 mm. The length is about 45 mm., and thickness is about 5 mm.

**Chipping Technique:** Shows rough percussion flaking on the surface with pressure flaking along the edge and fine retouching on the actual edges themselves.

**Diagnostics of the Type:** Long narrow points with a poorly defined shoulder and a slightly contracting stem.

**Temporal Range:** Lockport Focus.

**Geographical Range:** Unknown.

**Relationships:** Unknown.

**Whiteshell Side-notched** (Plate VII, Nos. 16 to 19). Nine points of this type are known from excavations in eastern Manitoba, and six of these came from the Cemetery Point site. The type, however, occurs in private collections from eastern Manitoba, but it seems to be slightly more numerous in private collections from western Manitoba.

**Form and Dimensions:** These points have gradually tapering tips and very slightly convex to straight lateral edges. The bases are slightly convex. Just above the base there are rather narrow side-notches between 4 and 7 mm. in width and about 5 mm. deep. Points range from 42 to 58 mm. in length, and the maximum width, which may be either just above the side-notches or just below them, ranges from 22 to 33 mm. Maximum thicknesses fall between 4 and 9 mm.

**Chipping Techniques:** Surfaces show irregular pressure flaking radiating from the tip-to-base axis, and there is finer retouching, usually around all edges. On two specimens there is some grinding within the side-notches, but this may be due more to wear than to purposeful grinding.

**Diagnostics of the Type:** Long narrow triangular points with convex bases and large side-notches.

**Temporal Range:** Six of the nine points found in excavation occurred in components of the Nutimik Focus. One was associated with the Selkirk Focus, and two were with the Nutimik Focus. The other occurred in Level 4 at Cemetery Point, just under the Nutimik remains with Whiteshell Focus materials. I suspect

that both these last-mentioned points were somehow intrusive. This point type occurs mainly during the Nutimik Focus times and is dying out during the early part of the Manitoba Focus.

**Geographical Range:** These points occur in southeastern Manitoba in some private collections and are very numerous in private collections from southwest Manitoba. They also occur in the Besant Focus of southern Saskatchewan.<sup>288</sup>

**Relationships:** It is possible that this type may be somehow derived from Parkdale Eared, and it seems to be very probable that it is ancestral to Prairie Side-notched.

**Eastern Triangular** (Plate VII, Nos. 7 to 11). Twenty-three of these points occurred in components of the Manitoba and Selkirk foci of eastern Manitoba and there are many more in surface collections from that region.

**Form and Dimensions:** These points are isosceles triangular in outline with slightly convex lateral edges and have from straight to slightly convex bases. They range in length from 9 to 32 mm., in width from 11 to 21 mm., and in thickness from 1 to 6 mm. The average is about 24 mm. long, 16 mm. wide, and 3 mm. thick.

**Chipping Technique:** These points are, for the most part, made from thin flakes fashioned into shape by pressure flaking along their edges. Only a few have pressure flaking on their surfaces.

**Geographical and Temporal Range:** In eastern Manitoba, points of this type occur in components of the Selkirk and Manitoba foci from A.D. 1000 to 1750.

**Relationships:** This type or similar types are widespread in North America in late prehistoric and early historic times.<sup>289</sup> Whenever they have been found under dry conditions with the shafts still attached, they are the points of arrows. Is it not possible that this type is derived from the much earlier triangular points of Cape Denbigh in the northwestern Arctic and that these in turn evolved from similar forms in the Neolithic of northeast Asia?

**Plain Side-notched** (Plate VII, Nos. 4 to 6). Five of this type occurred in our excavations in components belonging to the Selkirk and Manitoba foci. However, 27 of the type occurred in excavations at the Stott site belonging to the Manitoba Focus in the Brandon area, and they are abundant in private collections from all parts of the province.

**Form and Dimensions:** The points are roughly equilateral in outline with small side-notches. Lateral edges are usually straight to very slightly convex, and bases are usually straight, but a few are very slightly concave. The side-notches are between 1 and 2 mm. in width and depth. Points range from 10 to 18 mm. in length, 8 to 16 mm. in width, and are usually about 2 mm. thick.

<sup>288</sup> Wettlaufer, 1956.

<sup>289</sup> Suhm and Krieger, 1953, see *Fresnos Points*, p. 498.

**Chipping Techniques:** The points were usually made from thin flakes and may or may not have pressure flaking on their surfaces, but their edges always have delicate steep retouching.

**Diagnostics of the Type:** Small delicate equilateral triangular points with small side-notches.

**Temporal and Geographical Range:** In Manitoba these points occurred in the Selkirk and Manitoba foci in late prehistoric times. This type is widespread throughout the Canadian plains and prairies and appears in the adjacent area of the United States.<sup>290</sup> In these areas it is of roughly the same time period as in southeastern Manitoba. Actually, however, similar points occur over much of North America.

**Relationships:** These points may be derived from Whiteshell Side-notched.

**Prairie Side-notched** (Plate VII, Nos. 12 to 15). Only seven of this type occurred in the excavation, but 59 occurred at the Stott site, and they are very numerous in local collections.

**Form and Dimensions:** These points are roughly triangular in outline but have small side-notches above their irregular convex bases. They range from 19 to 33 mm. in length, from 15 to 30 mm. in width, and are between 4 and 6 mm. in maximum thickness. The side-notches are from 2 to 4 mm. deep and wide.

**Chipping Technique:** The points are made from thin flakes, but both their surfaces usually have been reworked by lateral pressure flaking, and the edges have been retouched.

**Diagnostics of the Type:** Small isosceles triangular points with side-notched and irregular convex bases.

**Temporal Range:** These differ from Plains Side-notched in that they appear in both the Selkirk and Manitoba foci in about the same proportion, and the former are mainly in the Manitoba Focus.

**Geographical Range:** Same as Plains Side-notched.

**Relationships:** They probably developed from Nutimik Side-notched and are companion to both Plains and Selkirk Side-notched types.

**Selkirk Side-notched** (Plate VII, Nos. 1 to 3). Ten of these occurred.

**Form and Dimensions:** These points are roughly long isosceles triangles with convex bases and slightly excurvate sides and usually have wide notches at the junction of the bases and sides (and just as well could have been called Selkirk Corner-notched instead of Selkirk Side-notched). In length they range from 19 to 30 mm. with an average of 25 mm., in width from 11 to 19 mm., with an average of 14 mm., and are about 3 mm. thick, with a range from 2 to 6 mm. The notches are rather wide (about 7 mm.) and shallow (between 2 and 3 mm. deep).

**Chipping Technique:** Surfaces show pressure flaking, but edges are retouched.

<sup>290</sup> Suhm and Krieger, 1954, Harrell Points, p. 509.

Diagnostics of the Type: Isosceles triangular points with convex bases and wide shallow notches near the junction of the bases and sides.

Geographical and Temporal Range: Points of this type are confined to the Selkirk Focus in eastern Manitoba.

Relationships: Possibly derived from Plains or Prairie Side-notched and roughly equivalent to Stott Corner-notched farther west in Manitoba.

## PART II

### STONE SCRAPERS

A stone scraper is here defined as a plano-convex artifact which has the flat surface unworked and the convex surface retouched. The convex surface is called the dorsal surface or side, and the flat surface is called the ventral surface. Edges are the sharp junction of these two surfaces. The retouched edge of the convex surface is referred to as the cutting edge, and the opposite portion is called the base. If the retouching is along the shorter edge or side, they are considered to be end-scrapers, whereas side-scrapers have the retouching along the longer edges or sides.

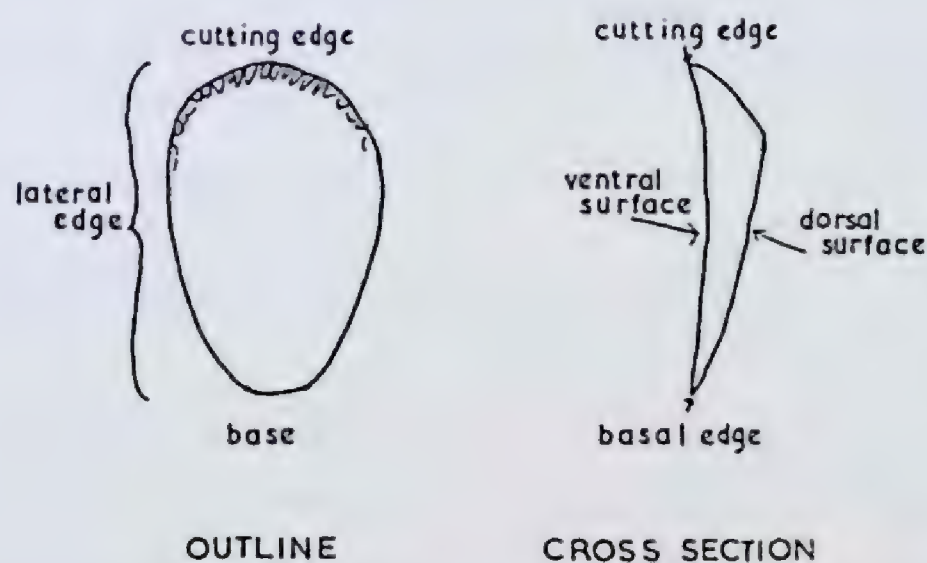


Figure 21. Scrapper terminology.

From ethnological evidence we know that this sort of tool is often used for the scraping of skins. However, various other bone, flint, ivory, and wood (nowadays iron and tin) implements, which I have not included in this section for convenience of description, are also used to scrape skins. It perhaps is also obvious that some of these tools, here called stone scrapers, might have had other functions than that of scraping skins. Certainly all of them could have been used for scraping wood and gouging out marrow from split bones. In the description of the various types, I shall point out some of their other possible functions.

The definition of a scraper type and the process for establishing scraper types are almost the same as that for projectile points. Thus there is no point in repeating it in this section.

A glance at the chart of distribution of scrapers (Table 3) in Manitoba reveals a number of significant facts. First of all, the fact that 291 scrapers were uncovered in excavations and that this is the largest single class of

artifacts (45 per cent, pottery excepted) indicates that scraping was an important industry. Again the general trends in scrapers from eastern Manitoba seem to parallel those of the Great Plains showing a predominance of small end-scrapers in late times, and larger end-scrapers along with spoke shaves and stemmed or notched end-scrapers early. The presence of prismatic flakes and prismatic end-scrapers is, however, a trait that distinguishes Manitoba from the regions farther west. The occurrence of these blades struck from polyhedral cores in layers with Hopewell-like pottery makes me suspect that they moved in together from the east. However, it is not beyond the realm of possibility that the prismatic blades moved into southeast Manitoba from the boreal forests to the north or northwest.

### SCRAPER TYPES

**Stemmed End-scrapers** (Plate VIII, No. 7). Two McKean Lanceolate projectile point types from the lower levels of Cemetery Point were retouched to form scrapers. One is 28 mm. long and 19 mm. wide, and the other is fragmentary; both are about 6 mm. in maximum thickness.

Temporal and Geographical Range: Whiteshell Focus.

Relationships: Same as McKean Lanceolate projectile point type.

Use: Such implements may have been hafted to a narrow stick for scrapers or for bunts on projectile point shafts.

**Spoke Shave** (Plate VIII, No. 11). This triangular flake of chert, 48 mm. wide and 25 mm. high, from Level 4 of Cemetery Point has two convex portions removed by re-chipping from its largest side. One of these notches is 26 mm. wide and 5 mm. deep, and the other is 5 mm. wide and 2 mm. deep.

Temporal and Geographical Range: Whiteshell Focus.

Relationships: Widespread in early horizons in the northern Plains.

Use: Since these may have been used for scraping skins, it is more likely that they were used to scrape bone or wood. Arrow and lance shafts have often been made by the use of such an implement.

**Large Flake Side-scrapers** (Plate VIII, No. 10). These have a variety of forms, though they are usually roughly oval. Most of them are large (being between 60 and 90 mm. long and 10 to 30 mm. thick). The ventral side is roughly flat, while the dorsal side is irregular and bears rough flaking marks. One dorsal edge usually bears retouching along it. Many of these implements look like cores which were split and then retouched along one of the longer edges.

Temporal and Geographical Range: In the Larter and Whiteshell foci in eastern Manitoba, but widespread in early horizons in the Great Plains.

Relationships: General.

Use: May have been used in the hand for scraping of skins, bone, or wood.

Table 3. Distribution of scraper types in the excavated sites in southeast Manitoba.

| Foci                                        | Sites                                       | Levels               | Totals | Stemmed End-scrapers | Spoke Shaves | Large Flake Side-scrapers | Ovoid Plano-convex End-scrapers | Small Disc Scrapers | Flake End-scrapers | Notched End-scrapers | Flake Side-scrapers | Pointed Flake Side-scrapers | Large Plano-convex End-scrapers | Oblong Plano-convex End-scrapers | Prismatic Blades | Prismatic End-scrapers | Triangular End-scrapers | Large Ovoid Scrapers or Abraders |       |
|---------------------------------------------|---------------------------------------------|----------------------|--------|----------------------|--------------|---------------------------|---------------------------------|---------------------|--------------------|----------------------|---------------------|-----------------------------|---------------------------------|----------------------------------|------------------|------------------------|-------------------------|----------------------------------|-------|
| SELKIRK.....                                | Alexander's Pt.....                         | 1-3                  | 8      | .....                | .....        | .....                     | .....                           | 2                   | .....              | .....                | 1                   | .....                       | .....                           | 3                                | .....            | .....                  | 1                       | 1                                |       |
|                                             | Lockport (1951).....                        | 1-2                  | 14     | .....                | .....        | .....                     | .....                           | 5                   | .....              | .....                | 3                   | .....                       | .....                           | 3                                | .....            | .....                  | 3                       | .....                            |       |
|                                             | Waulkinen.....                              | 1-2                  | 21     | .....                | .....        | .....                     | .....                           | 6                   | .....              | .....                | 3                   | .....                       | .....                           | 3                                | .....            | .....                  | 3                       | .....                            |       |
|                                             | Sturgeon Falls.....                         | 1-2                  | 22     | .....                | .....        | .....                     | .....                           | 8                   | .....              | .....                | 5                   | .....                       | .....                           | 4                                | .....            | .....                  | 4                       | .....                            |       |
|                                             | Lockport (1951).....                        | 3-4                  | 2      | .....                | .....        | .....                     | .....                           | 1                   | .....              | .....                | 1                   | .....                       | .....                           | .....                            | .....            | .....                  | .....                   | .....                            |       |
|                                             | Cemetery Pt.....                            | 1                    | 15     | .....                | .....        | .....                     | .....                           | 3                   | .....              | .....                | 1                   | .....                       | .....                           | .....                            | .....            | .....                  | .....                   | .....                            |       |
|                                             | Total scrapers for the focus.....           | .....                | 82     | .....                | .....        | .....                     | .....                           | 25                  | .....              | .....                | 25                  | .....                       | .....                           | .....                            | 14               | .....                  | .....                   | .....                            | 4     |
|                                             | Percentages of scraper types for focus..... | .....                | 100    | .....                | .....        | .....                     | .....                           | .30                 | .....              | .....                | .30                 | .....                       | .....                           | .....                            | .16              | .....                  | .....                   | .....                            | .05   |
|                                             | MANITOBA.....                               | Lockport (1951)..... | 5      | 20                   | .....        | .....                     | .....                           | .....               | 1                  | .....                | .....               | 12                          | .....                           | .....                            | 3                | .....                  | .....                   | .....                            | ..... |
|                                             |                                             | Rosser Mound.....    | .....  | 1                    | .....        | .....                     | .....                           | .....               | .....              | .....                | .....               | .....                       | .....                           | .....                            | .....            | .....                  | .....                   | .....                            | ..... |
| Lockport (1951).....                        |                                             | 6                    | 13     | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | 9                   | .....                       | .....                           | .....                            | .....            | .....                  | .....                   | .....                            |       |
| Cemetery Pt.....                            |                                             | 2                    | 12     | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | 2                   | .....                       | .....                           | .....                            | .....            | .....                  | .....                   | .....                            |       |
| Tuokko.....                                 |                                             | 2                    | 1      | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | .....               | .....                       | .....                           | .....                            | .....            | .....                  | .....                   | .....                            |       |
| Total scrapers for the focus.....           |                                             | .....                | 47     | .....                | .....        | .....                     | .....                           | 1                   | .....              | .....                | 23                  | .....                       | .....                           | .....                            | 11               | .....                  | .....                   | .....                            |       |
| Percentages of scraper types for focus..... |                                             | .....                | 100    | .....                | .....        | .....                     | .....                           | .02                 | .....              | .....                | .49                 | .....                       | .....                           | .....                            | .22              | .....                  | .....                   | .....                            | ..... |
| NUTMIK.....                                 | Lockport (1951).....                        | 7                    | 9      | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | 6                   | .....                       | .....                           | 2                                | .....            | .....                  | .....                   | .....                            |       |
|                                             | Cemetery Pt.....                            | 3                    | 31     | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | 10                  | .....                       | .....                           | 4                                | .....            | .....                  | .....                   | .....                            |       |
|                                             | Lockport (1951).....                        | 8                    | 8      | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | 6                   | .....                       | .....                           | 2                                | .....            | .....                  | .....                   | .....                            |       |
|                                             | Total scrapers for the focus.....           | .....                | 48     | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | 22                  | .....                       | .....                           | 8                                | .....            | .....                  | .....                   | .....                            |       |
|                                             | Percentages of scraper types for focus..... | .....                | 100    | .....                | .....        | .....                     | .....                           | .....               | .....              | .....                | .46                 | .....                       | .....                           | .02                              | .....            | .....                  | .....                   | .....                            |       |





**Ovoid Plano-convex End-scrapers** (Plate VIII, No. 12). Most of these are about 80 mm. long, 50 mm. wide, and 20 mm. thick (though a few from the surface of Larter were 160 mm. long and 80 mm. wide). They are oval or oblong in shape. Ventral sides are more or less flat with a few long flake scars on them, and dorsal sides are convex with a larger number of scars. Actually most of the dorsal flaking has been done along the fairly steep edges, and one of the shorter dorsal edges usually has rough retouching.

**Temporal and Geographical Range:** Most of these were in the White-shell and Larter foci, though one fragment appeared in the lowest pottery layer at Lockport (Lockport Focus).

**Use:** They may have been held in the hand to scrape skins, bone, and wood.

**Small Disc Scraper** (Plate IX, Nos. 2 and 3). These scrapers are 20 to 30 mm. in diameter and about 10 mm. thick. The ventral surface is usually concave, and the dorsal surface is flat to very slightly convex. The edges of the dorsal surface are retouched and usually very steep.

**Temporal Range:** Most of these were found in components of the Selkirk Focus, but three occurred at the Larter site.

**Geographical Range:** Widespread in the Great Plains.

**Relationships:** Very general.

**Use:** Because of their small size, I suspect most were set in handles to scrape skins, bone, and wood.

**Flake End-scrapers** (Plate VIII, Nos. 4 and 5). These show considerable range in size and many variations in form. However, all are made from thin elongated flakes with smooth ventral sides usually slightly concave, and dorsal sides are convex, irregularly chipped, and have retouching on one of the shorter dorsal edges.

**Temporal Range:** Confined to the lowest levels of Lockport, to the Larter site, and to Levels 4 to 6 of Cemetery Point.

**Geographical Range:** General.

**Relationships:** These end-scrapers are possibly ancestral to all the other later forms of end-scrapers.

**Use:** They were probably set into handles for scraping skins, bone, and wood.

**Notched End-scrapers** (Plate VIII, Nos. 8 and 9). Only three of these were found in excavation, two at the Larter site and one in the lower levels at Lockport. However, others exist in surface collections from the Larter site. All have convex cutting-scraping edges with retouching on the dorsal side. Dorsal surfaces also have pressure flaking on them. The basal corners are notched, or the sides just above the base are notched. Ventral surfaces are smooth and straight or slightly convex. Bases are straight or convex.

**Temporal Range:** Larter Focus.

**Geographical Range:** Unknown.

**Relationships:** These scrapers are possibly related to the thumbnail scrapers in the Eastern Archaic. Also, similar scrapers appear in the Lockhart River complex in the Northwest Territories.

**Use:** These were probably lashed to handles and used for scraping wood, skins, and bone. It is also possible that they were hafted and used as bunts on arrow shafts.

**Flake Side-scrapers (or Flake Knives)** (Plate VIII, No. 3). These are most difficult to describe as they have considerable range in size and a variety of forms. They have the following characteristics in common. All are made from long thin flakes (20 to 70 mm. long, 10 to 40 mm. wide, and 2 to 10 mm. thick) with their ventral surface smooth and straight or slightly convex; dorsal surfaces are irregular with a few long scars on them and with retouching along one (rarely both) of the longer dorsal sides. These retouched scraping edges are usually very slightly excurvate, but some are incurvate.

**Temporal Range:** Flake side-scrapers appear in every horizon. Proportionally they seem to be decreasing from Early to Late.

**Geographical Range:** Very widespread.

**Relationships:** Too general to comment on.

**Use:** They may have served as scrapers, but also could have been used as knives, or even hafted in slots as side-blades.

**Pointed Flake Side-scrapers (or Knives or Projectile Points or Borers)** (Plate VIII, Nos. 1 and 2). These scrapers have been made from long thin flakes. Ventral surfaces are smooth and flat or slightly convex, while dorsal surfaces have irregular longitudinal flaking scars. On the dorsal surfaces, retouching is found along both the edges adjacent to the point. The opposite side or end is irregular in form, and one even has a slight stem.

**Temporal Range:** Larter site.

**Geographical Range:** Unknown.

**Relationships:** Evidently this type is a variant of the flake scraper, retouched on two dorsal edges.

**Use:** A few of them could have been used as projectile points, drill points, or knife blades; they also would have been useable as scrapers.

**Large Plano-convex End-scrapers** (Plate VIII, No. 6). They range from 70 to 150 mm. in length, 40 to about 100 mm. in width, and from 16 to 51 mm. in maximum thickness. These are made from roughly-chipped ovoid cores that have been split. The convex edge of one of the shorter sides shows some rough retouching.

**Geographical and Temporal Range:** Such scrapers are common in surface collections from all over the province and adjacent areas of the Plains. In eastern Manitoba one occurred in the White-shell Focus level, two are from Larter, and one was associated with Nutimik remains.

**Use:** Such tools could have been held in the hand for scraping bone, wood, and skins. They are often called scraping planes, and in Romero Cave in Tamaulipas, Mexico, bark was actually found adhering to the cutting edge of a similarly-shaped tool.

**Oblong Plano-convex End-scrapers** (Plate IX, Nos. 10 to 12).

**Form and Dimensions:** All of the specimens have a slightly convex scraping end, slightly wider (20 to 25 mm.) than the opposite end (about 18 mm.). The sides are tapering and slightly convex and between 28 and 32 mm. in length. The ventral surface is flat or concave, and the dorsal surface is convex with percussion and pressure flaking on it. Dorsal surfaces are retouched, but the scraping edge is not much steeper than those of the other sides.

**Temporal Range:** From Anderson through Selkirk.

**Geographical Range:** Wide.

**Relationships:** It is possible that this type is ancestral to the isosceles end-scraper of a later time period and possibly derived from the flake end-scraper of the Larter Focus.

**Use:** They were probably set in handles for scraping skins, bone, and wood.

**Prismatic Blades** (Plate IX, No. 5). Three crude lamellar flakes occurred in Level 3 of Cemetery Point, and two occurred in later horizons. All have been struck from some sort of polyhedral core. All are about 14 mm. wide, two are about 30 mm. long, and the other is 65 mm. long. Ventrally, all are flat to slightly concave with a bulb of percussion near one end and a single ridge on their dorsal surfaces. Furthermore, the entire dorsal edges have been retouched. They have another peculiar feature: their dorsal ridge seems to have been smoothed or polished. Originally I thought this was due to abrasion in the ground, but since their edges are not ground, such a hypothesis is untenable. At present I am inclined to believe that this dorsal ridge polishing reflects wear caused by a portion of the handle into which they had been inserted.

**Geographical and Temporal Range:** In eastern Manitoba these are confined to the Selkirk, Manitoba, and Nutimik foci, but they are common on Middle Woodland horizons throughout the eastern United States.

**Relationships:** Not yet determined.

**Use:** As has been stated above, these were set into slots to serve as side blades. As such they could have been used as knives and to scrape skins.

## PLATE VIII. Manitoba Scraper Types.

- 1, 2. Pointed flake side-scrapers.
3. Flake side-scrapers.
- 4, 5. Flake end-scrapers.
6. Ovoid plano-convex end-scrapers.
7. Stemmed end-scrapers.
- 8, 9. Notched end-scrapers.
10. Large flake side-scrapers.
11. Spoke shave.
12. Large plano-convex end-scrapers.



1



2



3



4



5



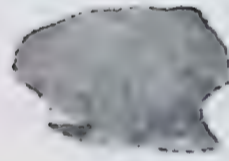
6



7



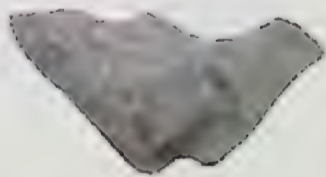
8



9



10



11



12

PLATE IX. Manitoba Scraper Types.

1. Large ovoid scraper or abrader.
- 2, 3. Small disc scrapers.
4. Prismatic end-scrapers.
5. Prismatic blade.
- 6-9. Triangular end-scrapers.
- 10-12. Oblong plano-convex end-scrapers.



**Prismatic End-scrapers** (Plate IX, No. 4). Fourteen scrapers of this type were found. They are all fairly long and narrow (ranging in length from 21 to 60 mm. with an average of 35 mm., and in width from 11 to 29 mm. with an average of 19 mm.). They are roughly triangular in outline and are ventrally concave and have a single dorsal ridge. On the wider end they have steep retouching, and along the edge they have fine pressure flaking. They do not appear to have been made from lamellar flakes.

**Geographical and Temporal Ranges:** Though they appear at most horizons in eastern Manitoba they are most numerous in the Nutimik Focus. What their wider geographical range is, is at present unknown.

**Relationships:** Undetermined.

**Use:** These were probably set into handles to scrape skins, bone, and wood.

**Triangular End-scrapers** (Plate IX, Nos. 6 to 9).

**Form and Dimensions:** The points are roughly in the form of isosceles triangles, though the sides are all slightly convex. Length ranges from 14 to 38 mm., width from 12 to 28 mm., and thickness from 3 to 10 mm. The ventral surface is concave, and the dorsal surface may range from flat to a definitely convex. The edges have fine retouching on them dorsally. The surface along the scraping end is usually steep and is very well retouched.

**Temporal Range:** These scrapers appear to have their greatest frequency in the Selkirk and Manitoba horizons but begin in the Nutimik Focus.

**Geographical Range:** Over much of the Plains in late prehistoric times.

**Relationships:** These scrapers are closely related to the smaller disc type. They may be derived from the oblong type.

**Use:** These were set into handles to function as scrapers.

**Large Ovoid Scrapers or Abraders** (Plate IX, No. 1). These large scrapers are roughly ovoid in shape and relatively thin. The one found in excavation is 118 mm. long, 65 mm. wide, and about 10 mm. thick. Evidently a thin flat slab of granite or sandstone was selected and then chipped in an ovoid shape. One of the shorter rounder ends bears smoothing, evidently the result of use.

**Temporal Range:** Only present in the historic Alexander's Point site. This type of scraper was used until very recently by the Cree and is still used by some of the more isolated groups.

**Geographical Range:** This type was used in early historic times in northern Manitoba, Saskatchewan, Alberta, the Yukon, and the Northwest Territories.

**Relationships:** On the basis of the distribution of this type, I suspect that it diffused relatively recently from the north and west into the Manitoba area.



Use: Some of these have small amounts of bifacial chipping, so in the strictest sense of the term they are not scrapers. However, since the unifacially chipped variety gradate into the bifacially chipped one, I have included the whole group as scrapers. In the Northwest of Canada these scrapers are usually hafted on long handles (often a broken canoe paddle) and are used to abrade skins after much initial scraping has been completed. I suspect these were used in the same way.

### PART III

#### CHIPPED BIFACIAL BLADES

A chipped biface is any stone artifact worked on both surfaces by chipping. What I am calling bifaces here are called by many New World archaeologists "blades." I believe that it is perhaps better not to use the term "blade" without a descriptive adjective because Old World archaeologists have restricted this term to refer to prismatic flakes or blades struck from polyhedral cores. As is perhaps obvious, projectile points are chipped bifaces, but I am not including them in this section. Perhaps this section would be better called chipped bifaces or bifacial blades, except projectile points.

An examination of the following chart will reveal that bifaces are fairly common in most horizons and do not seem to have sufficient temporal significance to be divided into types. Therefore these various groups of artifacts that I am about to discuss are really classes or trial types of bifaces that may eventually become types.

Ovoid bifaces, oblong bifaces, chipped discs, and triangular bifaces are differentiated one from the other on the basis of obviously different outlines. All could have been hafted to handles to form daggers or some sort of cutting tool. The large and small semi-lunar bifaces probably were set in the sides of bone handles for use as side-blades or knives. Choppers are thick bifaces which usually have a broad jagged cutting edge along one portion that may show battering. Also included among the bifaces are tools that I have called "borers." These are obviously bifacially chipped and have bodies that are roughly tear-drop shaped in outline, and tips, short, narrow, and relatively long.

As may be seen from Table 4, there is a general tendency for bifaces to be more prevalent in the early part of the sequence, but ovoid bifaces occur in all cultural phases. The Larter Focus has the widest variety of bifaces, but they are still not very numerous in terms of the total complex from the Larter site. Small semi-lunar bifaces (side blades) seem to occur in the foci with pottery.

**Ovoid Bifaces** (Plate X, Nos. 11 and 12). These bifaces are roughly tear-drop shaped in outline and range from 70 to 145 mm. in length, from 40 to 64 mm. in width, and from 10 to 26 mm. in thickness. Some of them have pressure flaking along their edges, while others have only percussion flaking.

They occurred in all horizons so far found in eastern Manitoba and were very numerous at the Larter site.





## PLATE X. Manitoba Bifacial Blade Types.

- 1, 2. Small half-moon-shaped bifaces.
3. Large semi-lunar biface.
- 4, 5. Bifacially chipped discs.
- 6, 7. Triangular bifaces.
8. Bifacial borer.
9. Oblong biface.
10. Biface chopper.
- 11, 12. Ovoid bifaces.



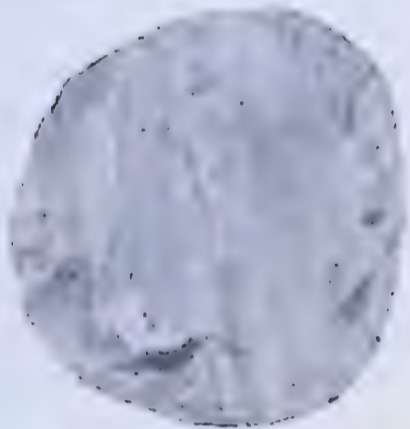
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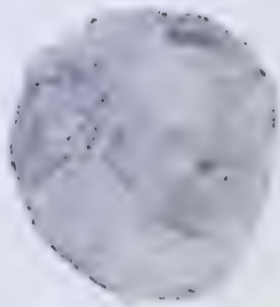
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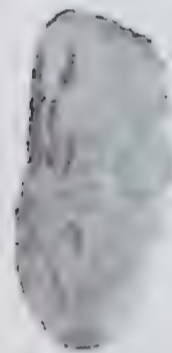
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11



12

**Biface Choppers** (Plate X, No. 10). These are not numerous. Four are roughly ovoid in outline, and the latest one is sub-triangular. All bear bifacial chipping and have some retouching or battering, perhaps by use, along one portion of their edge.

All of these range from 17 to 150 mm. in length and width, and have a maximum thickness of from 40 to 70 mm.

These seem confined to the Larter and Whiteshell foci in eastern Manitoba.

**Biface Borers** (Plate X, No. 8). One fragment and one whole borer were found at the Larter site and one occurred at Sturgeon Falls. The complete one is 46 mm. in length, 14 mm. in width, and has a maximum thickness of 7 mm. It has a long tapering tip, about 11 mm. long, and convex lateral edges that blend into a convex base. One surface is convex and has retouching only along the edges, and the other surface has a single flake scar ridge down its centre. With retouching running from the ridge to the edge, the tip itself is very slightly bevelled in cross-section.

**Oblong Bifaces** (Plate X, No. 9). These two from the Larter site are 16 and 63 mm. in length, 10 and 30 mm. in width, and both are about 8 mm. in maximum thickness. Both are made from thin flakes that have been pressure-flaked along their edges to form a biface roughly oblong in outline.

**Triangular Bifaces** (Plate X, Nos. 6 and 7). These occur only with the components of the Larter Focus. They are from 70 to 108 mm. in length, from 40 to 83 mm. in width, and all have a maximum thickness of about 12 mm. They have abrupt tips and convex lateral edges and bases. Most of them show only percussion flaking on their surfaces with small amounts of pressure flaking near their tips and sometimes on other portions of their edges.

**Large Semi-lunar Bifaces** (Plate X, No. 3). Only two of these were found, both in Level 3 at the Larter site. Both are roughly half-moon shaped and about 8 mm. in maximum thickness. The larger one is 116 mm. long and 43 mm. wide at the midpoint; the other is 81 mm. long and 42 mm. wide. They both have rough percussion flaking on both surfaces with retouching along their convex edge.

**Bifacially-chipped Discs** (Plate X, Nos. 4 and 5). These two occurred at the Larter site. They are 38 and 65 mm. in diameter and about 8 mm. thick. They were evidently made from large thin flakes that were made round by pressure flaking along their edges.

**Small Half-moon-shaped Bifaces** (Plate X, Nos. 1 and 2). Only four of these occurred, one at Cemetery Point, Level 3, Nutimik Focus, and one at Cemetery Point, Level 1, Selkirk Focus, while the other two came from components of the Manitoba Focus. They are roughly half-moon shaped in outline, between 52 and 60 mm. in length, and 20 to 32 mm. in width. All are about 8 mm. thick. Both surfaces bear pressure flaking, as do all their edges. The retouching along their straight edge is often rather steep.

## PART IV

## GROUND AND PECKED STONE TOOLS

Included in this class are a number of tools that have been formed either by grinding their surfaces or by rounding them into shape by pecking on them with a hard implement. The pecked stone implements include pebble hammerstones, three-quarter-grooved hammerstones or axes, anvil stones, and full-grooved mauls. Obviously, these pecked stone tools may have had more or less the same function, but the ground stone tools definitely did not. Ground stone tools include sinew stones, i.e., slabs of rock with narrow grooves worn into them, perhaps the result of abrading sinew; and arrow straighteners that are slabs of rock with a wide groove running across them that may have been used to polish arrow shafts. Also included with these tools are slate abraders, i.e., narrow slabs of slate that show an abraded flattened surface along one or more edges. These were probably used for abrading bone. These three tools are more or less similar in that they were used to shape other implements by being rubbed against them. Also included in the ground stone tools is an adze. An adze is a relatively flat and thin cutting implement of stone, in this case with a ground edge, hafted at right-angles to the handle, like a mattock. There also is a pestle that has been ground to an elongated bell form of the clapper variety. The wider portion of this bell shows evidence of wear and abrading. The final type of ground stone tool is pipes.

At present our sequence has few ground or pecked stone tools. Except for pebble hammerstones, a sinew stone, and a three-quarter-grooved hammerstone, they are almost absent from the pre-pottery horizons. It is not until the Nutimik Focus that many new ones appear. At that time the adze occurs. Bell-shaped pestles, full-grooved mauls, arrow-straighteners, and anvil stones begin in the Manitoba Focus, as well as the first pipes, which are tubular in form. Although the final horizon, the Selkirk Focus, has many of the older ground and pecked stone tools, it has new pipe forms and a relatively large number of slate abraders.

Most of the tools mentioned here seem to have some temporal significance and therefore are considered to be types.

**Pebble Hammerstones.** All these tools are made from elongated river pebbles between 70 to 150 mm. in length and from about 50 to 100 mm. in diameter. One or both of the ends show pitting or pecking, resulting probably from use.

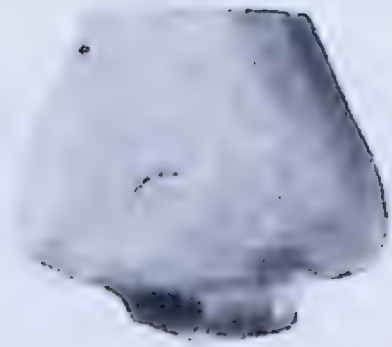
They appear in all horizons, and there is a tendency for them to be smaller in the Larter Focus than in the later components. They were probably used as hammerstones held in the hand.

**Three-quarter-grooved Hammerstone.** This one tool from Larter is 128 mm. in length and 68 mm. in diameter. Encircling the middle of this tool is a groove, about 10 mm. in depth and about 30 mm. in width, which has been pecked three-quarters of the way around. One end also shows pitting, probably made by use. This tool was probably used as a hammer and hafted to a handle.

PLATE XI. Manitoba Ground and Pecked  
Artifacts.

1. Sandstone Micmac pipe.
2. Tubular pipe.
3. Anvil stone.
4. Arrow straightener.
5. Ground adze.
6. Full-grooved maul.
7. Sinew stone.





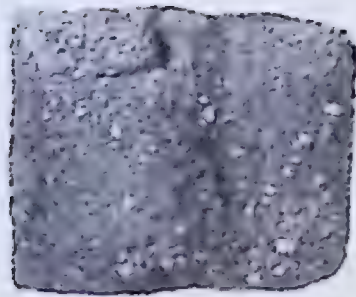
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Table 5. Distribution of ground and pecked artifacts in the excavated sites in southeast Manitoba.

| Foci         | Sites                                   | Levels | Total | $\frac{3}{4}$ grooved Hammerstones | Sinew Stones | Pebble Hammerstones | Ground Adzes | Bell-Shaped Pestles | Arrow Straighteners | Anvil Stones | Tubular Pipes | Full-grooved Mauls | Cathinite Pipes | Sandstone Micmac Pipes | Net-sinkers | Slate Abraders |
|--------------|-----------------------------------------|--------|-------|------------------------------------|--------------|---------------------|--------------|---------------------|---------------------|--------------|---------------|--------------------|-----------------|------------------------|-------------|----------------|
| SELKIRK..... | Alexander's Pt.....                     | 1-3    | 3     | .....                              | .....        | .....               | .....        | .....               | .....               | 1            | 1             | .....              | .....           | .....                  | .....       | 1              |
|              | Lockport (1951).....                    | 1-2    | 10    | .....                              | .....        | 1                   | .....        | .....               | .....               | 3            | 1             | 1                  | .....           | .....                  | 1           | 2              |
|              | Waulkinen.....                          | 1-2    | 3     | .....                              | .....        | .....               | .....        | .....               | .....               | .....        | .....         | .....              | .....           | .....                  | .....       | 3              |
|              | Sturgeon Falls.....                     | 1-2    | 11    | .....                              | .....        | 8                   | .....        | .....               | .....               | 1            | .....         | .....              | .....           | .....                  | .....       | 2              |
|              | Cemetery Pt.....                        | 1      | 3     | .....                              | .....        | .....               | .....        | .....               | .....               | .....        | .....         | .....              | 1               | .....                  | .....       | 1              |
| MANITOBA.... | Total ground stone for the focus.....   | .....  | 30    | .....                              | .....        | 9                   | .....        | .....               | .....               | 5            | 2             | 1                  | 1               | 1                      | 2           | 9              |
|              | Percentages of types for the focus..... | .....  | 100   | .....                              | .....        | .30                 | .....        | .....               | .....               | .17          | .07           | .03                | .03             | .03                    | .07         | .30            |
|              | Lockport (1951).....                    | 5      | 2     | .....                              | .....        | 1                   | .....        | .....               | .....               | .....        | .....         | 1                  | .....           | .....                  | .....       | .....          |
| NUTMIK.....  | Rosser Mound.....                       | .....  | 2     | .....                              | .....        | .....               | .....        | .....               | .....               | .....        | 2             | .....              | .....           | .....                  | .....       | .....          |
|              | Lockport (1951).....                    | 6      | 3     | .....                              | .....        | .....               | .....        | 1                   | 1                   | 1            | .....         | .....              | .....           | .....                  | .....       | .....          |
|              | Total ground stone for the focus.....   | .....  | 7     | .....                              | .....        | 1                   | .....        | 1                   | 1                   | 1            | 2             | 1                  | .....           | .....                  | .....       | .....          |
| ANDERSON...  | Percentages of types for the focus..... | .....  | 100   | .....                              | .....        | .14                 | .....        | .14                 | 14                  | 14           | 30            | 14                 | .....           | .....                  | .....       | .....          |
|              | Cemetery Pt.....                        | 3      | 1     | .....                              | .....        | .....               | 1            | .....               | .....               | .....        | .....         | .....              | .....           | .....                  | .....       | .....          |
| LARTER.....  | Anderson.....                           | 2      | 1     | .....                              | .....        | 1                   | .....        | .....               | .....               | .....        | .....         | .....              | .....           | .....                  | .....       | .....          |
|              | Larter.....                             | 3      | 3     | 1                                  | 1            | 1                   | .....        | .....               | .....               | .....        | .....         | .....              | .....           | .....                  | .....       | .....          |
| ANDERSON...  | Larter.....                             | 4      | 2     | .....                              | .....        | 2                   | .....        | .....               | .....               | .....        | .....         | .....              | .....           | .....                  | .....       | .....          |
|              | Grand Totals.....                       | .....  | 44    | 1                                  | 1            | 14                  | 1            | 1                   | 1                   | 6            | 4             | 2                  | 1               | 1                      | 2           | 9              |

**Sinew Stone** (Plate XI, No. 7). From the Larter site one fragment of soft shale has a series of grooves, about 6 mm. deep and 3 mm. wide, worn into it. Since no ground bone or stone tools have been uncovered from this site, it is thought that these grooves were worn by abrading some material such as leather or sinew.

**Ground Adze** (Plate XI, No. 5). A fragment of the cutting edge of an adze occurred in Level 3 of Cemetery Point, a component of the Nutimik Focus. It has two polished, parallel, slightly curved surfaces about 40 mm. wide. Viewed from side to side, the ventral surface is slightly concave, and the dorsal is convex. From the cutting edge toward the bit, the dorsal side is slightly convex, and the ventral side is very slightly convex right at the cutting edge and then more or less straight. The sides have also been ground at right-angles to the surfaces.

From this small piece and from the fact that the cutting edge from side to side is convex on the dorsal side and concave on the ventral side, it is thought that it was hafted at right-angles to the handle and used like a mattock.

**Bell-shaped Pestle.** The only pestle found occurred in Level 6 of Lockport, a component of the Manitoba Focus. It is made from limestone and is 108 mm. long. The base is excurvate and about 40 mm. in diameter. The body is only slightly larger and flares out to form the pounding end, which is 60 mm. in diameter. This pounding end is very slightly convex and is abraded. The whole pestle has been ground into its bell-shape form, and may have been held in the hand for grinding in some sort of mortar.

**Arrow Straightener** (Plate XI, No. 4). In the lower part of Zone D, Level 6 of Lockport, a component of the Manitoba Focus, a fragment of sandstone with a shallow rounded groove running across it, was found. This groove is about 12 mm. in diameter. The straightness of the groove and the roundness of the cross-section of the groove lead to the deduction that this implement was possibly used for abrading the wooden shafts of arrows or lances, thereby making these shafts straight and smooth.

**Anvil Stones** (Plate XI, No. 3). At Alexander's Point, Sturgeon Falls, and Zone A of Lockport (all components of the Selkirk Focus), and Zone D of Lockport of the Manitoba Focus component, disc-shaped pebbles occurred that have a rounded pecked depression on one of the flatter sides. These depressions vary from 7 to 20 mm. in diameter and are usually about 3 mm. deep. I believe these pebbles with their pecked depressions represent anvils on which flint tools were manufactured.

**Full-grooved Mauls** (Plate XI, No. 6). One battered fire-broken fragment of a full-grooved maul occurred in Pit I of Lockport, a Selkirk Focus component, and one in Level 3 at Lockport associated with Manitoba Focus pottery. Both are roughly cylindrical-shaped, being about 150 mm. long and about 70 mm. in diameter. Both have flattened

ends that show battering, and their central portion is encircled by a pecked groove about 25 mm. wide and about 10 mm. deep. These implements were probably hafted to a handle with a split end and used as hammers or mauls. This tool is very common throughout the Canadian plains and prairies.

**Tubular Steatite Pipes** (Plate XI, No. 2). Two large fragments of tubular steatite pipes occurred in the Rosser Mound, a component of the Manitoba Focus, while two smaller fragments of such were uncovered from Selkirk Focus components at Lockport and at the Alexander's Point site. All pipes seem to taper from their mouths to their bits and look roughly like cigar holders. Mouths are roughly 20 mm. in diameter, while bits are about 10 mm. One of those from the Rosser Mound has a narrow sleeve about 10 mm. in width at the bit.

**Catlinite Pipe.** One small flat fragment of catlinite with a portion of a hole for a stem was excavated from Level 1 of Cemetery Point, a component of the Selkirk Focus. This fragment seems to be part of a pipe with a rectangular bore but is too small for me to discern its total form.

**Sandstone Micmac Pipe** (Plate XI, No. 1). In the Selkirk Focus manifestation, Zone A of Lockport, a large fragment of a Micmac pipe was uncovered. Smaller bits of soapstone, which may be fragments of similar pipes, occurred at Alexander's Point and in Zone A of Lockport. The large fragment has a bulbous bowl that tapers toward the mouth and has a maximum diameter of 63 mm. This upper portion is separated from the bulbous lower half by a deep crude encircling groove. The interior of the pipe has a cone-shaped hollow that tapers from 10 mm. at the mouth to 5 mm. half-way down the bowl. This interior section of the bowl is cylindrical from half-way down the bowl into the lower bulbous section. Unfortunately, the way in which this lower part of the interior of the bowl was connected with the stem cannot be seen from this fragmentary pipe. However, similar pipes from Manitoba usually have a narrow hole at right-angles to the central part of the bowl in their lower bulbous half. The interior hole in the bowl of this pipe has definite rifle grooving, and one cannot help but wonder if it was made by some European implement.

Pipes similar to this are common in collections in Manitoba, and many are obviously of European manufacture.

**Slate Abraders.** Common to all Selkirk Focus components are slate abraders. All these abraders are made from flat slabs of slate and show polishing along one of their narrow edges. This polishing is usually at right-angles to the flat surfaces of the slabs. Such abraders may have been used in the manufacture of bone tools.

**Net Sinkers.** Two flat ovoid pebbles about 150 mm. long, 80 mm. wide, and 25 mm. thick have a pecked or chipped notch in their two long edges. These, I believe, are net sinkers for gill nets. They both occurred in Selkirk Focus manifestations, Level 1 of Cemetery Point and of Lockport.

## PART V

## BONE AND SHELL TOOLS

Our samples of bone tools are not large, and the terminology of the bone tools is so obvious that no definitions are necessary. With the exception of split bone awls that appear in most parts of our sequence, the bone and shell tools fall into very definite types which have definite distributions in time. Generally speaking, bone and shell tools do not become popular until the Manitoba and Selkirk foci. Previous to that time the large unilateral multi-(square-)barbed spear point of the Whiteshell Focus and the pointed beaver tooth engraving tools are the only specialized artifacts. However, at the time of the Manitoba Focus a series of new tools appear. They include smaller barbed points, bone fleshers, and bird-bone whistles. Besides these bone tools, shell dishes and tubular shell beads appear for the first time. The Selkirk Focus sees a continuation of most of these tools as well as the addition of needles, antler celts, scapula hoes, beaver tooth gouges, and ulna awls.

I very much suspect that as more digging is done in southeastern Manitoba, more types of bone and shell tools will be found with every focus, and some of the distributions of the types we have found may change.

**Unilateral Multi-(Square-)barbed Antler Point** (Plate XII, No. 5).

Found in Level 6 of Cemetery Point with Whiteshell Focus remains was a large barbed antler point. It is flat (having a maximum thickness of 9 mm.), tapers from back to front (having a maximum width at its basal barb of 28 mm.), and is 215 mm. long. It has a slightly thinned squared base with a line hole just back of the last barb. Its tapering tip from the last barb to the point is 72 mm. One side is polished and slightly excurvate; the other side has five barbs. These barbs, except for the one nearest the pointed tip, have flat tops parallel to the general slope of the side and two parallel ends (about 15 mm. apart) that slope back obliquely from the main axis of the point. The line hole seems to have been made by the use of a hand drill, since it is hour-glass in shape. Also the surface bears whittling marks rather than polishing. The line hole and thinned base indicate that this point was probably detachable from the main shaft, and the large size suggests that it was used for spearing sturgeon.

**Pointed Beaver Teeth** (Plate XII, No. 1). These two beaver teeth tools came from Zone E of the 1951 Lockport excavation, Level 7 and Level 8, levels with mainly Laurel and Lockport ware pottery (Nutimik Focus). Hlady, however, listed one as occurring with his earliest pottery, so this trait may also occur in the Anderson Focus. The beaver teeth tools have been cut obliquely on the labial surface just below the biting edge (occusal surface) so that the biting edge is entirely removed and a point is formed at the end of the tooth where the natural side and oblique cutting edge meet. The angle of the point is about 45 degrees, and the cutting is from the left to the right side of the biting edge.

I would suspect that such a tool may have been used for engraving or slitting leather or the like.

PLATE XII. Manitoba Bone and Shell  
Artifacts.

1. Pointed beaver tooth.
2. Columella shell bead.
3. Ulna awl.
4. Antler end-scraper.
5. Unilateral square-barbed antler point.
6. Long bone flesher.
7. Bird-bone whistle.



PLATE XIII. Manitoba Bone and Shell  
Artifacts.

1. Beaver tooth gouge.
2. Notched bone.
3. Unilateral pointed barbed antler point.
4. Bone needle.
5. Shell paint dish.
6. Scapula hoe.
7. Antler celt.
8. Awl.



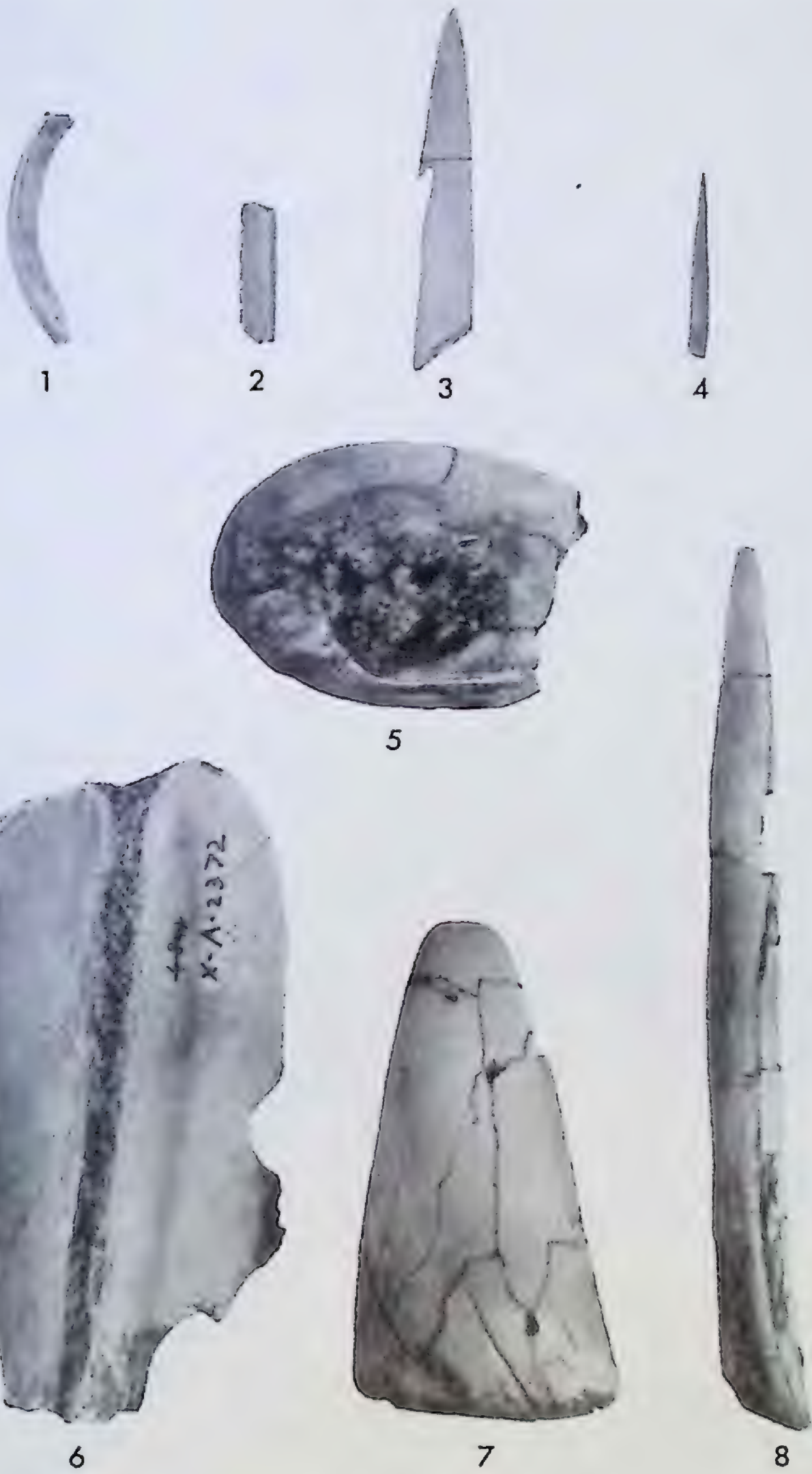


Table 6. Distribution of bone and shell tools in the excavated sites in southeast Manitoba.

| Foci         | Sites                | Levels | Total | Unilateral Square-barbed Antler Points | Pointed Beaver Teeth | Antler Flakers | Split Bone Awls | Columnella Shell Beads | Bird-Bone Whistles | Double-Pointed Pins | Shell Paint Dishes | Long Bone Fishers | Unilateral Pointed Barbed Antler Points | Antler End-scraper Handles | Uma Awls | Beaver Tooth Gouges | Antler Celts | Bone Needles | Scapula Hoes | Notched Bones |
|--------------|----------------------|--------|-------|----------------------------------------|----------------------|----------------|-----------------|------------------------|--------------------|---------------------|--------------------|-------------------|-----------------------------------------|----------------------------|----------|---------------------|--------------|--------------|--------------|---------------|
| SELKIRK..... | Lockport (1951)..... | 1-2    | 13    | .....                                  | .....                | .....          | 1               | .....                  | .....              | .....               | 1                  | 1                 | 1                                       | 1                          | 2        | 1                   | 1            | 1            | 2            | 1             |
|              | Waulkinen.....       | 2      | 1     | .....                                  | .....                | .....          | .....           | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
|              | Sturgeon Falls.....  | 1-2    | 4     | .....                                  | .....                | .....          | .....           | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | 2        | 2                   | .....        | .....        | .....        | .....         |
| MANITOBA...  | Lockport (1947)..... | 2      | 7     | .....                                  | .....                | .....          | 1               | .....                  | 1                  | .....               | .....              | 1                 | 1                                       | 1                          | .....    | 2                   | .....        | .....        | .....        | .....         |
|              | Lockport (1951)..... | 5      | 2     | .....                                  | .....                | .....          | 2               | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
|              | Rosser Mound.....    | .....  | 10    | .....                                  | .....                | .....          | 1               | 1                      | 4                  | 1                   | 2                  | .....             | 1                                       | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
| NUTIMIK....  | Lockport (1951)..... | 7      | 2     | .....                                  | 1                    | .....          | 1               | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
|              | Lockport (1947)..... | 5      | 1     | .....                                  | .....                | .....          | 1               | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
|              | Lockport (1951)..... | 8      | 1     | .....                                  | 1                    | .....          | .....           | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
| ANDERSON...  | Lockport (1947)..... | 6      | 2     | .....                                  | 1                    | 1              | .....           | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
| WHITESHELL   | Cemetery Pt.....     | 6      | 1     | 1                                      | .....                | .....          | .....           | .....                  | .....              | .....               | .....              | .....             | .....                                   | .....                      | .....    | .....               | .....        | .....        | .....        | .....         |
|              | GRAND TOTALS.....    | .....  | 44    | 1                                      | 3                    | 1              | 7               | 1                      | 5                  | 1                   | 3                  | 2                 | 3                                       | 2                          | 4        | 6                   | 1            | 1            | 2            | 1             |

**Antler Flaker.** At Lockport Hlady found with Laurel Ware pottery a fragment of a deer antler tine, which shows evidence of having been cut and pounded on one end. This I consider to have been an antler flaker, possibly used in the manufacture of chipped stone tools.

**Split Bone Awls** (Plate XIII, No. 8). At Lockport, bone awls were found in Levels 1, 2, 5, and 7, of the 1951 trench, thus indicating their presence in the Selkirk, Manitoba, and Anderson foci. Furthermore, they occurred at all the ceramic levels in the 1947 trenches and in the Rosser Mound. Most of the awls appear to be made of split sections of large bones that have been polished along their edges and at the point.

**Columella Shell Bead** (Plate XII, No. 2). In the Rosser Mound, one portion of the columella of a conch shell from the Gulf of Mexico, about 32 mm. long, has been ground to form a cylinder 16 mm. in diameter and then pierced lengthwise. As this hole is about 4 mm. in diameter and has parallel sides, except right at its mouth, one would suspect it was drilled by some sort of bow drill. These beads are a common ornament in Manitoba Mounds and are a diagnostic of the Manitoba Focus.

**Bird-bone Whistles** (Plate XII, No. 7). Four bird-bone whistles occurred in the Rosser Mound, and Hlady discovered a piece of one in Level 2 at Lockport in 1947. These are all made from crane leg-bones that have had both their distal and proximal ends cut off. They vary from 140 to 280 mm. in length and are about 20 mm. in diameter. Near one end they all have a roughly equilateral triangular section (20 mm. to a side) cut from one surface. Such artifacts are common in Manitoba Focus Mounds.

**Double-pointed Pin.** In the Rosser Mound with Burial Pit 2 there was found a rib section that has had both its ends polished to points. It is 200 mm. long, has a maximum width of about 12 mm. at its centre, and a maximum thickness of 7 mm.

**Shell Paint Dishes** (Plate XIII, No. 5). In Pit I of the 1951 excavation at Lockport (Selkirk Focus) and in the Rosser Mound (Manitoba Focus), oyster shells were found containing a large quantity of red ochre. These I consider to have been paint dishes.

**Long Bone Fleshers** (Plate XII, No. 6). Only one fragment was found in the 1951 excavation at Lockport in Pit I of Zone A (Selkirk Focus). However, numerous fragments of bone fleshers were found in the upper levels of the 1947 excavations (Manitoba Focus). The tools are made from one-half of a long bone of deer, elk, caribou, or moose (being between 60 and 250 mm. in length). These half fragments are usually split and then ground on the inner surface so that there is a sharp excurvate edge in the middle of the long bone at the junction of the inner ground surface and the exterior surface. Most of the cutting edge has been broken off, but the Zone A specimen of 1951 and some of the 1947 specimens have notches or nicks in the excurvate cutting

edge. Temporally this tool is definitely associated with the Selkirk Focus in the 1951 dig and seems also to have been with the earlier Manitoba Focus, since in the 1947 dig these tools were associated with levels in which Manitoba Ware predominated. Ethnologically, Skinner reports fleshers in use among the Cree; this implement is widely used by Indians to the north and west of them.

**Unilateral Multi-pointed Barbed Points** (Plate XIII, No. 3). In Pit I, intrusive from Zone A at Lockport, a fragment of a unilateral bone harpoon or fish spear that has two barbs was found. The harpoon is broken just below the second barb so the type of base is unknown. In the 1947 dig at Lockport a fragment of similar fish spear was found in the upper levels associated with Manitoba Ware sherds, and a whole one occurred in the Rosser Mound. The latter is 126 mm. long and has a maximum width of 18 mm. It has three pointed barbs on one side and two single line holes. It tapers to a point from the line holes and also tapers slightly to a square base.

**Antler End-scraper Handles** (Plate XII, No. 4). In Pit 5 of Lockport (Manitoba Focus) there occurred an implement made from a deer rib. The sides taper from a square end about 20 mm. wide, which appears to have had a side-to-side groove in it, to a polished round base about 11 mm. wide. One surface has been split revealing the bone interior, and the other still has the natural rib exterior. A study of the squared end where the interior is showing reveals a small polished portion, yet the rest of that surface does not. I have interpreted this as indicating that this squared end had been grooved and a stone end-scraper had been set in it and that one side of the slot had been polished through use. Later, one surface with the other side of the slot had been split off thereby showing the interior as well as a portion of the polished slot. Thus I have concluded that this implement was a bone handle for a stone end-scraper.

**Ulna Awls** (Plate XII, No. 3). From Sturgeon Falls two fragments of beaver ulna, and from Pit I of Lockport (Selkirk Focus) a fragment of beaver ulna and probably a deer ulna have had their distal ends polished to a point. These I believe were used as awls.

**Beaver Tooth Gouges** (Plate XIII, No. 1). In Zone A of Lockport, the Waulkinen, and Sturgeon Falls sites (Selkirk Focus), beaver teeth were found which had abrading on the interior surface next to the biting end. This abrading is at a 45-degree angle to the interior groove found naturally near the tip of a beaver tooth. This abrading, I believe, was caused by the use of the tooth as a tool. Furthermore, the angle of the abrading would seem to indicate the tooth was used as a gouge. Perhaps it was set in a handle (like the Cree crooked knife) or used in the beaver jaw with the bone of the jaw serving as a handle. Two similar teeth were reported as occurring in the upper level of the 1947 dig, associated with Manitoba Focus sherds, but, unfortunately, I have not seen these tools.

**Needle** (Plate XIII, No. 4). This fragment of a needle occurred in that delightfully productive Pit I at Lockport (Selkirk Focus). The needle is made from a split bird bone. It is narrow, having a maximum width of 4 mm. The length is unknown, as it is broken. However, the broken fragment has a slightly worn groove in it, which I believe is the end of the eye of the needle. This eye-groove is 41 mm. from the tip.

**Antler Celt** (Plate XIII, No. 7). This is a unique specimen. It is made from moose or elk antler. It is roughly an isosceles triangle in outline, being 55 mm. wide at the base and 106 mm. long. In cross-section from side-to-side it is roughly oval, while from end-to-end it is roughly triangular. The cross-section at the base is 28 mm. thick and tapers with very slight excurvate surfaces to the point which is roughly 2 mm. thick. Except for basal end or poll, the surfaces are smooth and somewhat polished. One surface is, however, much more highly polished than the other. The tip or bit, and portion of one side and surface have been slightly burned. Whether this was done to increase the hardness, or accidentally, cannot be told exactly, but I suspect it is the former since it is so obviously the tip, the part that must necessarily be hard, that was burned. Along the edge near the base is a series of small nicks and grooves. The tip of the tool is blunted, nicked, and slightly splayed, evidently by use. Originally I thought this implement was some sort of wedge. However, the polishing on one side, owing to use as well as shaping, the blunted bit from percussion use, and scars on the side near the base, perhaps concerned with hafting, lead me to believe that this tool functioned as some sort of celt or adze.

**Scapula Hoes** (Plate XIII, No. 6). Two deer scapula hoes were uncovered, one by Vickers with the Selkirk Focus bundle burial at Lockport, and the other in Pit 5 at Lockport, extending down from Selkirk Focus occupation. The proximal ends of both have been broken off, but the distal edges of both are excurvate and highly polished as are both surfaces near the distal end. This polishing, I believe, was due to its use. They both are about 80 mm. wide and reach a maximum thickness of about 20 mm. near their broken ends. Both are much more highly polished on their concave side than on the surface with the single ridge, so I suspect they were hafted like an adze and used like a hoe or mattock with the concave edge striking the earth first.

**Notched Bones** (Plate XIII, No. 2). Both these pieces of bone (probably ribs) have a series of small notches (1 mm. wide) about 3 mm. apart. One came from the surface at Lockport, and the other came from Level 2 of the Alexander's Point site, a Selkirk Focus component. The exact function of these objects is at present unknown. The one from the surface at Lockport makes dentate stamp impressions like those found on Laurel Ware pottery, but there is no proof that they were used for such.

## PART VI

## POTTERY

Pottery is here defined as that ware moulded from certain earth materials, usually clay, and hardened by heat. A study of pottery is usually very important to archæologists for a number of reasons. First of all, pottery does not deteriorate with time. Secondly, when pottery does appear in aboriginal sites it usually occurs in relatively large amounts and often represents the largest proportion of ancient artifacts that the archæologist recovers in any particular site or level of the site. Thirdly, pottery shows considerable variable factors, such as decoration, vessel form, method of manufacture, and so forth, which can be combined in innumerable ways. These combinations of variables usually change in time and vary from group to group, and the chance of an independent invention of a specific combination of these variables is relatively remote. Thus pottery is an excellent tool for the archæologist, for by plotting the various kinds of pottery, layer by layer, he can see changes in time and establish types that are time-markers. Furthermore, since different groups of people often made different kinds of pots, he can plot their distribution in space. Also, since it is highly unlikely that exact duplication of the numerous variables of pottery would be re-invented by pure chance, archæologists are enabled to point out cultural relationships on the basis of similar pottery. Usually the archæologist is working with fragments of pottery that are called potsherds.

It has been convenient for the archæologist in describing and studying pottery to consider it under four main headings, i.e., the paste, the surface finish, the decoration, and the vessel form.

Paste may be defined as the way in which clay and temper material is mixed, moulded, and fired to form the pottery. Under paste the archæologist usually considers first the temper. Temper may be defined as an aplastic material added to clay to reduce its stickiness and to allow steam to escape through the walls of the pot when it is fired. Usually under temper the archæologist considers the kinds of materials used, such as shell, bone, quartz, grit, fired clay, and so forth. Furthermore, he usually studies the size of the tempering material and its relative amount in the clay. Next, he usually considers the consistency of the paste, i.e., the texture of the paste and how the temper and clay have been mixed together. A further consideration of the paste is its colour, which results from firing. Colour is usually described by reference to standard paint colours found in Ridgway's "Color Standards and Color Nomenclature" printed in Washington, D.C., in 1912. The hardness of the surface of the pottery is also considered to be a factor in the firing of the paste. It is measured by the use of the usual geological hardness crystals. Though not being a direct factor in the paste, the thickness of the sherds and the method of manufacture of the vessel are usually considered under the general heading of paste.

A second main heading under which pottery is described and studied is called surface finish, i.e., how the surface of the pottery vessel was treated during its manufacture. There are, of course, a variety of ways that it can be treated, and some of them are considered in Manitoba pottery

descriptions, such as smoothing, cord-marking, fabric-impressing, and wiping. Since these terms are descriptive, there is no need for further defining them.

Pottery, of course, may be decorated in an infinite number of ways. In this description of Manitoba pottery we will consider the method of decoration, the part of the pot that is decorated, and the actual motif of the decoration. We have illustrated the various kinds of motifs that appear on the Manitoba pots and will refer to this figure in the descriptions (*See Figure 23*).

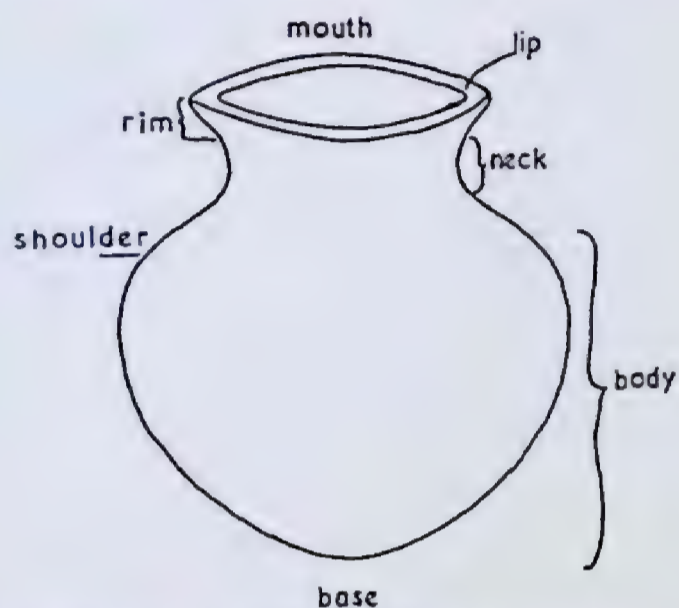


Figure 22. Pottery vessel terminology.

The final main category of pottery is vessel form. As may be seen from the above figure, pots are considered to have mouths, lips, rims, necks, shoulders, bodies, and bases (*See Figure 22*).

All the variations of factors of paste, surface finish, decoration, and vessel forms are considered ceramic features. It is, of course, obvious that any one of these features may undergo change in time and space. However, as with the projectile points, it has been convenient to lump the various changes of pottery features into pottery types. In reality, of course, these pottery types are potsherd types, and a pottery type may be defined as a class or group of inter-related similar ceramic features having temporal or spatial significance. Some sherds are either so rare in our excavations, or so definitely different from the sherds of Manitoba and so similar to those from other areas, that we have considered them unclassifiable aberrant sherds. Some of these, of course, may be trade sherds, and others are merely unusual combinations of ceramic features that the group, as a whole, did not use. The technique of establishing pottery types is so much like that described for projectile points that it is not necessary to repeat it here.

However, for convenience in description, pottery types, unlike other artifact types, have been lumped into larger categories. The larger category is called a ware and includes a number of pottery types having similar paste, surface finish, and sometimes vessel form.

Now let us examine the sequence of pottery types in Manitoba. As may be seen, the earliest two cultural complexes of Manitoba are entirely without pottery. The first pottery appears in the Anderson Focus. It is characteristically smooth and is decorated by the punching of the







clay with either a notched, pointed, or rectangular object. By Nutimik Focus times, much of this punching gives way to incising or marking with the edge of a cord-wrapped paddle. Also many of the vessels have cord-marked surfaces and short vertical necks. Eventually by Manitoba Focus times, the smooth pottery and punched pottery disappear entirely, and all pottery is cord-marked. Decoration is made by the edge of a cord-wrapped paddle, and vessels have short vertical necks and thickened lips. This kind of pottery is superseded in the Selkirk Focus by a new kind of pottery that characteristically has fabric-impressed bodies, a very limited amount of decoration on the lips and, rarely, on the necks, and is short, squat in form, with a flaring mouth. As perhaps obvious from the chart, there are four main periods of ceramic change, and each period has distinctive pottery types. When this sequence is compared with other areas, some similar sequences are to be found, but none are exactly the same. The sequence starting with Laurel Ware, which gives way to Lockport Ware, which in turn is finally supplanted by Manitoba Corded Ware, is almost identical to the ceramic sequence found in northern Minnesota. However, in the final period, the Manitoba sequence is distinctive in having fabric-impressed pottery. The ceramics of the United States' Great Plains, and the Canadian plains and prairies show little similarity to Manitoba materials either as a whole or in any single period. In the mid-western States the ceramic sequences have only a slight resemblance to the ones from Manitoba. There, some of the Hopewellian-like pottery is a little like our Laurel Ware, and the mid-western Post-Hopewell period has ceramics that are vaguely like Lockport and Manitoba Corded Wares, but later pottery is entirely different. Interestingly enough, the Manitoba pottery shows considerable resemblance to the pottery found in the northeastern United States and the adjacent part of Canada. The earliest pottery in the northeast, such as Vinette I Ware or wares of Early Woodland times, is lacking in Manitoba, but the Point Peninsula wares that follow Vinette I wares in New York are extremely similar to our Laurel Ware. Furthermore, the Owaseo wares of New York that follow Point Peninsula have a similarity to the Lockport and Manitoba Corded Wares. However, the final Iroquois Wares of the northeast are different from our Winnipeg Fabric-impressed Wares that last until historic times. One cannot help but feel that somehow the southeastern Manitoba, northern Minnesota, and Northeastern Woodland ceramics are genetically connected on an early time-level. However, considerably more archaeological investigation is necessary before this can be established.

## POTTERY TYPES

### WARE: *Laurel Plain*

From excavated levels came 2,603 pieces of pottery of this ware, and about 2,000 others were examined. These are the basis for this description.

#### PASTE:

Temper: Quartz, quartzite, small pebbles, mica, and sand compose the tempering materials. Temper particles range in size from .05 to 6 mm. in diameter with the average being about 2 mm. The temper appears in medium amounts with about 50 pieces of tempering appearing in a cubic centimetre.

Texture: The texture is coarse, and sherds are crumbly.

Colour: Exteriors of sherds range from dusky neutral grey to apricot-orange with the majority being pale yellow-orange. Interiors range from black to apricot-orange with the majority being deep

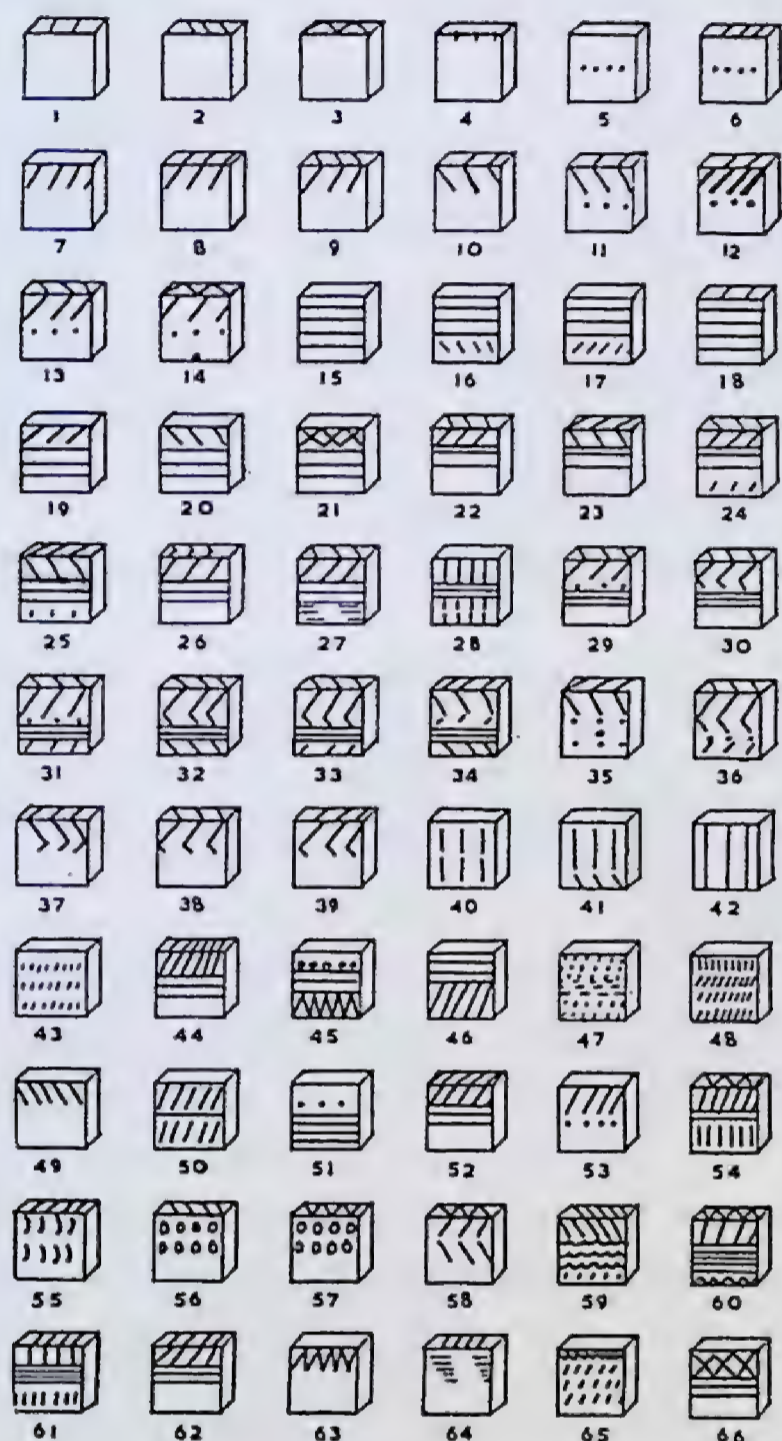


Figure 23. Ceramic motifs.

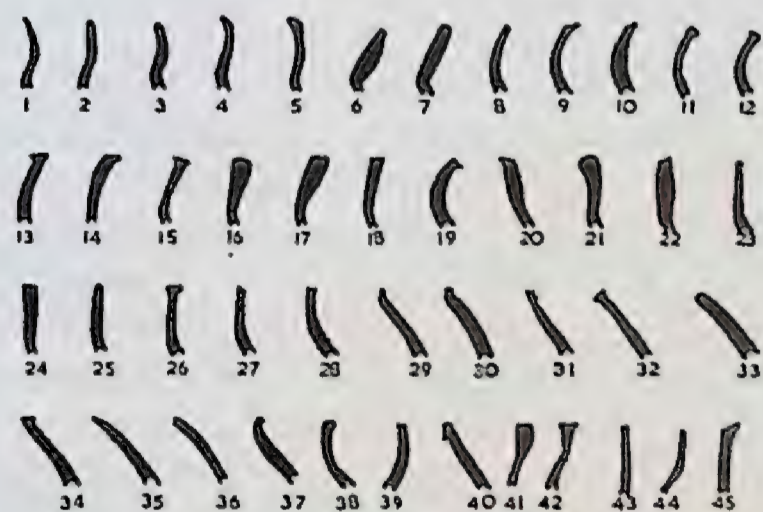


Figure 24. Pottery rim cross-sections (pot interiors to the left).

mousy-grey. In cross-section the interiors of the sherds are black or grey, and the interiors near and at the surface show a marked change in colour turning to orange or lighter grey.

Hardness: About 2.5.

Thickness: Sherds range from 5 to 14 mm. in thickness with the average being about 8 mm.

Method of manufacture: The vessels seem to have been made by the coiling method, and sherds showing coil breaks are fairly common.

Surface finish: All surfaces are smoothed. Sometimes very faint thin brush marks, indicating that vessels were brushed smooth when the surfaces were wet, may be seen.

VESSEL FORM: Large parts of two whole vessels were found in excavation and about 300 rim sherds that revealed 13 different vessel forms were studied. The dominant over-all vessel form is roughly coconut-shaped with a slightly flattened base.

Lips: Lips are either rounded or dully pointed with only a very few flattened.

Rims: Rims are generally slightly convex exteriorly and insloping, and about one-half of them are very slightly straightened just below the lip by pressure and pinching on the interior surface. In cross-section, most rims are definitely contracting toward the lip (Figure 24, Nos. 29 to 36, 38, and 40).

Necks: Non-existent.

Bodies: The rims blend into an ovoid or ellipsoid body.

Bases: Only 18 fragments of bases were found. Sixteen are subconical, but two (both found in Lockport 1947 excavation) are flattened.

TYPE: Laurel Dentate (Plate XIV, Nos. 4 and 5).

Paste and surface finish: Previously described under ware.

Decoration: Decoration is made by impressing some sort of toothed or notched object into the wet clay. One small piece of notched bone found below the bank at Lockport may very well be representative of the type of object used (Plate XIII, No. 3). The dentate impressions themselves show considerable variation in size with dentate width ranging between .5 mm. and 2 mm., the average being little over 1 mm., and dentate length ranging from 1 mm. to 6 mm. with the average being about 2 mm. The barrier or wall between the dentates also shows considerable variation, sometimes being just barely apparent or apparent on one side, and at other times it is well defined; the dentates range from being sharply rectangular to occasionally oval or V-shaped. The decoration occurs on the lip and inner rim, as well as on the outer rim, extending on to the upper one-third of the body.

Parallel horizontal lines of dentate stamps (Figure 23, No. 15) are only slightly more common than parallel vertical lines composed of short ( $\frac{3}{4}$  inch) dentate impressions separated from each other by a short space ( $\frac{3}{4}$  inch) (Figure 23, No. 40). A row of oblique

lines on the rim above parallel lines of dentate stamps are common (mainly Figure 23, No. 19 and, rarely, No. 20). In some cases there are vertical lines of dentates below the horizontal ones (Figure 23, No. 28). Simple oblique dentates on the rim occur (Figure 23, Nos. 7 and 42). Punctates usually occur about an inch below the lip on the outer rim and are elliptical in shape.

Vessel form: Previously described.

Diagnostic features of the type: Large temper, thick, smooth surface sherds decorated with dentate stamps on outer rim and upper body. Vessels have pointed or rounded lips, insloping contracting rims, and ellipsoid bodies.

Geographical range: The type appears in the Laurel Focus of northern Minnesota,<sup>291</sup> most of southern Manitoba,<sup>292</sup> and I have seen a few similar sherds from the middens in southeast Saskatchewan.

Temporal range: At Lockport in central Manitoba and in excavation in northern Minnesota<sup>293</sup> this type is one of the earliest found in stratified sites. It does not continue markedly into later ceramic complexes.

Relationships: On a more general level, this type bears a great resemblance to the Vinette Dentate type of the northeast.<sup>294</sup> The design motifs, dentate technique of design, the paste, and the exterior surface finish are significant similarities between the two types. Vessel forms and interior surface finish are, however, different. An even more vague resemblance also may be seen between this pottery and some of the Hopewell pottery farther south. However, resemblances to Hopewell are markedly less pronounced than those to Vinette. Certainly the closest genetic connection of Laurel Dentate is to the Northeast. However, further work on the problem is necessary.

**TYPE: Lockport Linear** (Plate XIV, Nos. 1 to 3).

Paste, surface finish, and vessel form: Previously described.

Decoration: Decoration is made by a series of lines composed of linear punches either overlapping or placed end to end. The linear punch is of two main varieties that temporally and spatially seem to have the same distribution. One set has a punch that is roughly 2 mm. square, while the other has a roughly rectangular punch about 7 mm. long and 1 mm. wide. The roughly rectangular type is slightly more common than the squared type.

Decoration occurs on the interior rim, exterior rim, and upper half or upper one-quarter of the body.

Most of the sherds have horizontal parallel lines composed of linear punches about 10 mm. long on both the rim and body (Figure 23, No. 15). However, some have oblique or vertical lines of linear punctates on the rim above horizontal lines on the body

<sup>291</sup> Wilford, 1955.

<sup>292</sup> See Vickers' collection at the Provincial Library in Winnipeg.

<sup>293</sup> Wilford, 1955.

<sup>294</sup> Ritchie and MacNeish, 1949.

PLATE XIV. Manitoba Pottery Types.

1-3. Lockport Linear sherds.

4,5. Laurel Dentate sherds.

6-8. Lockport Plain sherds.

PLATE XIV

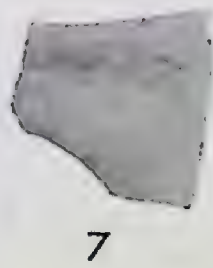
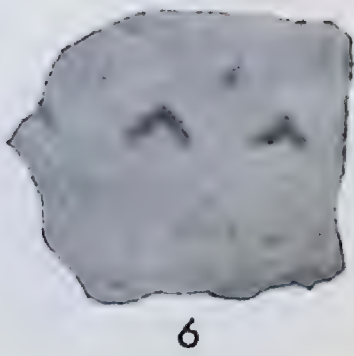
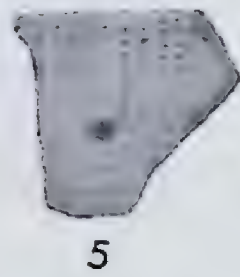
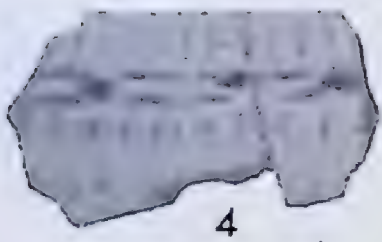
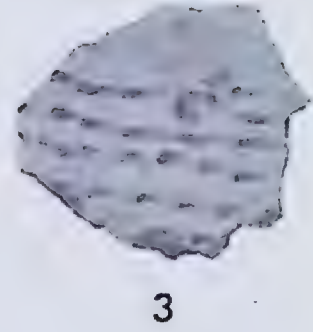
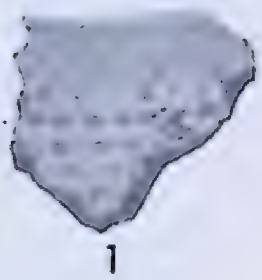
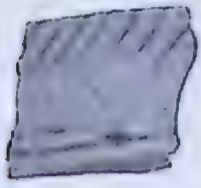


PLATE XV. Manitoba Pottery Types.

1-3,5. Cemetery Point Incised sherds.

4,6-10. Nutimik Oblique sherds.

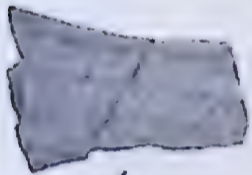




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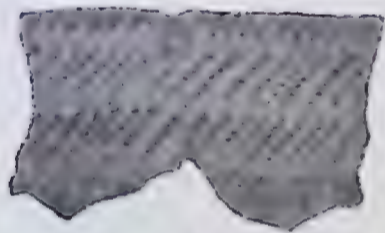
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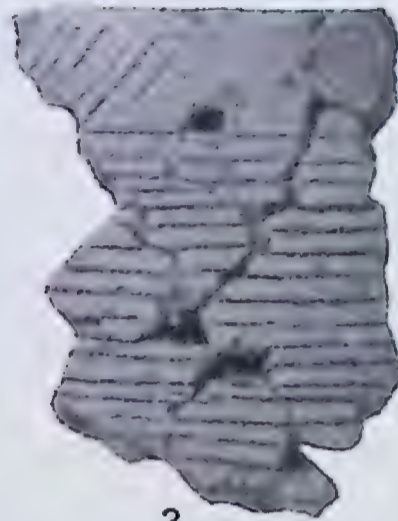
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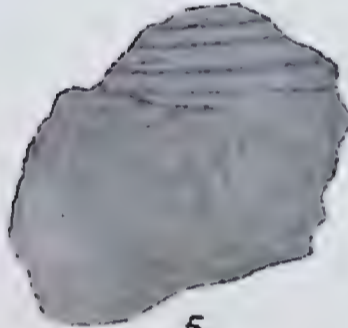
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10



3



5

(Figure 23, Nos. 19, 20, and 28). A very few show only vertical (Figure 23, No. 42) or oblique (Figure 23, No. 7) lines on the rim, while one sherd has a criss-cross design on the rim (Figure 23, No. 21). Ovoid punctates appear at the base of the rim.

**Diagnostics of the type:** Lines composed of overlapping or end-to-end punctates on the pointed lips, vertical rims, and the upper portions of ellipsoid bodies. The surface of this type is smooth, and the paste has heavy temper and a coarse texture.

**Temporal range:** This type, like Laurel Dentate, occurs only in the earliest ceramic complex of northern Minnesota and southern Manitoba.

**Geographical range:** The type seems to have its centre of concentration in the upper Red River Valley and occurs rarely in the surrounding areas.

**Relationships:** Unknown.

**TYPE: Lockport Plain** (Plate XIV, Nos. 6 to 8)

**Paste, surface finish, and vessel form:** Previously described.

**Decoration:** Except for punctates and nodes on the rim, decoration is totally absent. Most of the rim sherds show elliptical punctates (except one with a triangular punctate) from the exterior. However, two rim sherds from the earlier levels show punctates from the interior toward the exterior with nodes on the exterior. Punctates or nodes are usually about 50 mm. apart.

**Diagnostics of the type:** Coarse texture, large temper, and smooth surface, with no decoration except exterior elliptical punctates around the rim. Equally diagnostic are the vessel forms with pointed or rounded lips, a contracting vertical rim, and ellipsoid bodies.

**Temporal range:** At Lockport this type reaches its greatest frequencies in earliest ceramic times and dies out shortly thereafter. It may well be the oldest type. In the rest of Manitoba and northern Minnesota it appears with the earliest ceramic congeries.

**Geographical range:** Southern Manitoba and northern Minnesota.

**Relationships:** At present unknown.

**TYPE: Nutimik Oblique** (Plate XV, Nos. 4,6 to 10).

**Paste, surface finish, vessel form:** Described under Ware.

**Decoration:** Decoration on this type is confined to the upper one-half or one-third of the body. Most of the decoration is made by impressing a small object (between 8 and 25 mm. long and 1 mm. wide), which had an edge like that of a scallop shell, into the wet clay, but a few of the decorations are made with a short narrow stylus. The predominant motif is a series of closely-spaced horizontal bands composed of closely-spaced oblique scallop-shell-like impressions (Figure 23, No. 43 and Plate XV, Nos. 5, 7 and 10). However,

one pot has two bands of plats between the bands of oblique impressions (Figure 23, No. 47, and Plate XV, No. 9) and a few others have either a band of cross-hatched or vertical lines around the rim (Figure 23, Nos. 28, 48, and 65).

**Diagnostics of the type:** Closely spaced horizontal bands composed of closely spaced oblique scallop-shell-like impressions on the upper half or one-third of grit-tempered coconut-shaped pots.

**Geographical and temporal range:** Mainly confined to components of the Nutimik Focus at Lockport and Cemetery Point, though one sherd of this type appeared at the Anderson site, and some were found in survey in southeast Manitoba.

**Relationships:** Types similar to this one are not known from the surrounding areas, but in southeast Ontario and upper state New York the Vinette Complex Dentate<sup>295</sup> is extremely similar and, I believe, somehow related.

**TYPE: Cemetery Point Incised** (Plate XV, Figures 1 to 3,5).

**Paste, surface finish:** Previously described under Ware.

**Decoration:** The decoration on this type is by deep poorly-executed incising about 2 mm. wide and deep. This decoration occurs on the upper half of the body. The dominant motifs are horizontal, parallel lines (about 25 mm. apart) which encircle the upper half of the vessels (Figure 23, No. 15). Sometimes these are associated with vertical rocker stamping (Figure 23, No. 45), the second commonest motif, which occurs on the central or lower portion of the body. Rims are decorated in three ways: smoothed rims above a row of circular exterior punctates on the neck (Figure 23, No. 51), wide cross-hatching (Figure 23, No. 21), and, rarely, oblique incised lines (Figure 23, No. 7).

**Vessel form:** While vessels are more or less coconut-shaped as far as their bodies are concerned, this type tends to have vertical rims and squared lips (Figure 24, No. 28).

**Diagnostics of the type:** Horizontal parallel incised lines with or without rocker stamping below them and with or without cross-hatching, smoothing above punctates, or oblique incised rims on coconut-shaped vessels with vertical rims and squared lips.

**Temporal range:** Confined to the Nutimik Focus.

**Geographical range:** Cemetery Point and Lockport sites in eastern Manitoba.

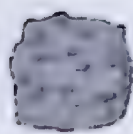
**Relationships:** Closely related types are not known from the surrounding area, but the incising, cross-hatched rims and rocker stamping of this type have a general resemblance to Hopewellian types in the midwestern United States.<sup>296</sup>

<sup>295</sup> Ritchie and MacNeish, 1949.

<sup>296</sup> Griffin, 1952a, see Hopewell Roeker type, p. 118.

PLATE XVI. Manitoba Pottery Types.

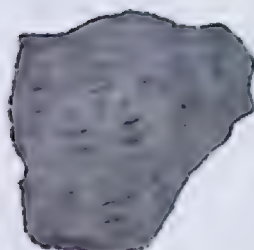
1. Net-impressed ware.
2. Lockport Cord-marked sherd.
- 3-9. Lockport Cordwrapped stick sherds.



1



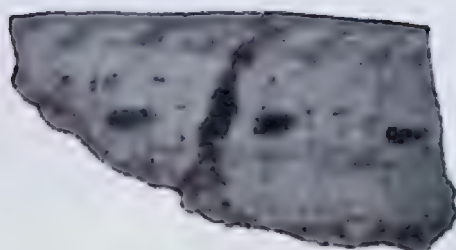
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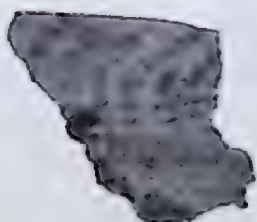
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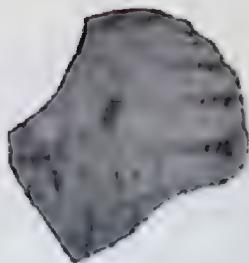
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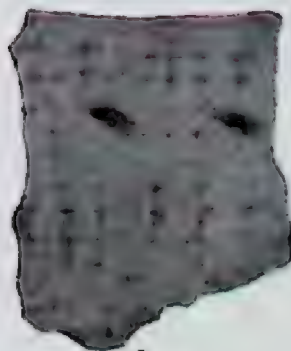
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9

WARE: *Lockport Cordmarked*

Only 582 sherds came from excavation, but I examined about 500 more from collections.

## PASTE:

Temper: The temper consists of quartz, small pebbles, sand, quartzite, and, occasionally, pieces of limestone. Particles range in size from .05 to 4 mm. in diameter, with the average being about 1.5 mm. The temper appears in medium amounts, about 95 pieces appearing in one cubic centimetre.

Texture: The texture is extremely coarse; the interiors of sherds are slightly crumbly, have numerous short laminations giving an angular appearance, and are quite porous.

Colour: Exterior surfaces range from black to salmon with the larger part being an ochraceous salmon. Interiors, though showing considerable range in colour, are often light drab in colour. In cross-sections, sherds show uniformity of colour from surface to surface, and when any change does occur, it is right at the surface.

Hardness: About 2.5.

Thickness: Ranges from 5 to 12 mm. with the average being about 8 mm.

Method of manufacture: As occasionally sherds may be found with an actual coil break, I suspect the method of manufacture was by coiling.

**SURFACE FINISH** (Plate XVI, No. 2). Surfaces have been smoothed over after originally being cord-marked. The cord impressions generally are vertical, but there is considerable range of variation. As the sherds have been smoothed, the distance between the parallel cord marks is difficult to estimate. Cord impressions, however, are never less than 1 mm. apart and may be 30 mm. apart. A distance of 18 mm. between cord-markings seems to be about average. The cords themselves are fairly narrow, being about 1.5 mm. in diameter. Cords are composed of two elements tightly twisted clockwise. Occasionally small striations appear in the cord impressions suggesting that the cord was made from some sort of fine fibre (Indian hemp?).

**VESSEL FORM:** I have examined only about 80 rim sherds of this type and have seen no whole vessels. My conclusions about vessel forms of this ware are, therefore, tentative.

Lips: Generally speaking, they are very slightly convex or rounded.

Rims: Most rims are more or less vertical, and in cross-section are very slightly contracting. A few, however, thicken toward the lip (Figure 24, Nos. 23 to 28).

Body and neck: A vertical neck blends into an elongated body with a sub-conoidal base.

**TYPE: Lockport Cord-wrapped Stick** (Plate XVI, Nos. 3 to 9).

Paste, surface, and vessel form: Previously described.

Decoration: Decoration occurs on the rim, neck, and upper portion of the body. Rarely does it appear on the lip. Decoration is by cord-wrapped stick or the edge of a cord-wrapped paddle. The fact that the impressions show the cords to be widely spaced but still at right angles to the object they encircle suggests that they were wrapped around a fairly large flat object such as a paddle.

The cords are between .15 and 3 mm. in width with the average being slightly more than 1 mm. The cord itself shows some variation; for in some cases it appears to be composed of two elements twisted clockwise, whereas in others it is merely a single untwisted strand. The cords appear to have been loosely wrapped around the paddle, and characteristically the impressions are about 3 mm. apart (ranging from 1 to 3 mm.). Furthermore, the rows of cord-wrapped paddle impressions are not close together, usually being about 4 mm. apart (but ranging from 1 to 8 mm. apart). In size and kind of cords and in distance apart they are very similar to the cord-marked impressions on the bodies of the vessels, and one cannot help but wonder whether the bodies were marked by the flat portion of the paddle and the decorations made by its edge.

The commonest motif is oblique lines on the neck and body (Figure 24, Nos. 7, 40, 49, and 63). Many of these are rockered cord-wrapped paddle-edge impressions, but some of them may not be.

The next commonest design is a series of horizontal parallel rows of cord-wrapped stick or paddle-edge designs that encircle the vessel on the rim, neck, and upper part of body (Figure 24, No. 15). In a few cases, the lip has oblique impressions on it (Figure 24, No. 18). Less common are vertical (Figure 24, No. 42) or oblique (Figure 24, No. 43) rows of paddle-edge impressions on the rim, neck, and upper body; rarely there are oblique impressions on the lip (Figure 24, No. 9). Also rare is a band of oblique or vertical impressions on the rim above a horizontal band of horizontal impressions on the neck and uppermost body (Figure 24, Nos. 19, 20, and 22).

Usually there is a single horizontal row of widely-spaced elliptical punctates around the neck.

Diagnostics of the type: Widely spaced cord-wrapped stick or paddle-edge impressions in horizontal rows, or vertical or oblique stripes on round-lipped vertical-necked jars, which have cord-marking or smoothed-over cord-marking on their ellipsoid bodies.

Temporal range: This type starts during the last phases of the Lockport Focus, reaches its maximum during late Nutimik times, and dies out before the Manitoba Focus. The type appears to represent one that exists in both these foci.

Geographical range: This type appears in most of southern Manitoba and in northern Minnesota. In Minnesota the type is most common in sites of the Mille Lacs Aspect.<sup>297</sup>

Relationships: The type, like other early ones, has affinities to the northeast, specifically with Point Peninsula Corded.<sup>298</sup> In Manitoba and Minnesota the type may well be ancestral to Manitoba (Headwater's Lake) ware.

#### WARE: *Manitoba Corded*

There were 1,914 sherds found in excavation in southeast Manitoba. I have examined about 4,000 additional sherds from surface collections and other excavations. The following is based on this sample:

##### PASTE:

Temper: Granite, mica, feldspar, quartz, quartzite, and small pebbles occur as temper in the order mentioned, ranging in size from .025 to 3 mm. in diameter, with average about .5 mm. Temper occurs in small amounts with about 45 pieces occurring in a cubic centimetre.

Texture: Coarse and characterized by a very laminated and porous paste.

Colour: Exterior surface from light ochraceous salmon to black with the majority being deep mousy-grey. There is less range in interior colour with very few salmon and many black or blackish-brown. In cross-section, centres are black or mousy-grey. On many sherds the same colour occurs from surface to surface, while some have only a very slight change right at the surface.

Hardness: About 3.

Thickness: As, generally speaking, rim and neck sherds are much thicker than body sherds, I will consider them separately. Body sherds range from 2 to 8.5 mm. with the average being about 4 mm. (based on a sample of 50 random sherds). Rim sherds at the lip range in thickness from 6 to 13 mm. with an average of 9 mm.

Method of manufacture: Neither study of sherds nor microscopic examination of sherd cross-sections revealed coil breaks. This fact in conjunction with their cord-marked surfaces leads to the conclusion that they were at least finished by the paddle and anvil technique. It is, of course, possible that they were originally coiled and later thinned and finished by the paddle and anvil method.

SURFACE FINISH: Bodies of this type always bear cord-marking with the cord-marks more or less parallel and running vertically. The cords vary between 1 and 4 mm. in diameter with the average being about 2 mm. The vertical impressions are between .05 and 6 mm.

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<sup>297</sup> Wilford, 1955.

<sup>298</sup> Ritchie and MacNeish, 1949.



apart, usually being about 2 mm. The cords seem to be composed of one or two elements (usually the latter) and have been loosely twisted counter-clockwise, though a few are clockwise. Just what the actual cord was composed of is difficult to determine; a few sherds show fibrous strand impressions, but most of them do not. However, the latter may be due more to the method of impression and wetness of the clay rather than the presence or absence of fibrous string.

The cord impressions seem to have been made by the application of a cord-wrapped paddle to the surface of the vessel when the clay was wet or damp. The basis for this conclusion is that sherds show small patches with a series of parallel cords with the same pattern continuing for some distance to other little patches with parallel cords at slightly different angles; i.e., the latter cords are not a continuation of the first set of cords. I do not have enough very large sherds to tell exactly the number of cords. On the basis of five of the largest sherds, it would appear that the cord encircled the paddle from 10 to 20 times and that paddles were at least 2 inches wide.

Necks and rims of vessels usually appeared to have been smoothed or brushed before decoration was applied to them. Interior surfaces were wiped or smoothed with a horizontal motion.

**VESSEL FORM:** Only one pot and about 250 rim sherds of this ware have been examined. However, the rim sherds of this ware indicate that only one general vessel form is dominant.

**Lips:** Lips are always flattened and spread by pressure from above the lip. Most of the lips are at an acute angle to the exterior surface of the rim.

**Rims:** Rims, generally speaking, thicken toward the lip and are very slightly outflaring and outsloping (Figure 24, Nos. 11 to 23).

**Necks:** Rims gradually blend into a fairly long cylindrical neck which ends abruptly at the body.

**Bodies and bases:** Judging from one pot and a few (5) large sherds, bodies seem to be elongated globular with sub-conoidal bases.

**TYPE: Manitoba Horizontal** (Plate XVII, Nos. 3 and 5).

**Paste, surface finish, and vessel form:** Previously described.

**Decoration:** Decoration occurs on the lip, rim, and neck. The decoration is made by a cord-wrapped stick. The cords range in width from .025 to 1.5 mm. with the average being about 1 mm. They have been wrapped around the stick or paddle so that they are next to each other. The rows of cord-wrapped stick or paddle-edge impressions are usually very close to one another, never being more than 3 mm. apart.

The designs of this type are fairly varied, but all have round punctate impressions exteriorly on the lower rim or neck and oblique cord-wrapped stick impressions on the lip. The commonest design has oblique right to left rows of cord-wrapped stick

impressions on the lip, oblique left to right cord-wrapped stick impressions on the rim, and three to ten horizontal rows on the rim and neck (Figure 23, No. 22). Sometimes there are small rows of punctates or oblique gouges below the horizontal impressions at the junction of neck and rim. There are a number of minor variants of the basic design with the oblique rows oriented in other directions, but they are not numerous (Figure 23, Nos. 23 to 26). Many of the sherds show only the horizontal portion of this design with or without the punctates (Figure 23, Nos. 15 and 16) while less frequently the lip and rim portion appear (Figure 23, Nos. 1, 9, and 13).

Two sherds of two variants of the basic design show oblique plats of cord-wrapped stick below the horizontal lines (Figure 23 No. 27). Five sherds, however, are rather different in that they have oblique left to right or right to left rows of cord-wrapped stick impressions on the lip, oblique left to right rows of cord-wrapped stick impressions on the rim, and vertical elongated punctates on the neck, and no horizontal lines (Figure 23, Nos. 11, 12, and 13). All sherds of this type were fairly near the top at the excavation at Lockport, and one appeared on the surface at the Alexander's Point site. This may become another type when more data are available, but for the present I have lumped it with Manitoba Horizontal. Superficially, it represents a good transition between designs of Sturgeon Fabric-impressed and Manitoba Horizontal.

**Diagnostics of the type:** Oblique rows of cord-wrapped stick designs on a thickened lip and bands of oblique cord-wrapped stick designs on an expanding slightly outflaring rim with horizontal rows of cord-wrapped stick impressions on the neck above an elongated globular body covered with cord-marking.

**Temporal range:** This type lasts until very late prehistoric times but appears mainly confined to the Manitoba Focus.

**Geographical range:** The type is common in northern Minnesota and southern Manitoba and at one time-level appears to link the cultures of these areas.

**Relationships:** This type appears to be related directly to the Blackduck pottery of Minnesota, North Dakota, and southeast Manitoba (Lake of the Woods region, etc.).<sup>299</sup> On a wider basis it is very similar to the early part of the Owaseo horizon of Ontario and New York State.<sup>300</sup> The similarity of the designs between the technique of design of late variants of these types and Winnipeg River Fabric-Impressed Ware suggests that this type may have been ancestral to the earlier Cree types. The motifs and method of design also suggest that Lockport Corded may be the ancestor to both.

<sup>299</sup> Wilford, 1945.

<sup>300</sup> Ritchie and MacNeish, 1949, *see* Owaseo Corded Horizontal type.

**TYPE: Manitoba Herringbone** (Plate XVII, Nos. 6 and 7).

Paste, surface finish, and vessel form: Previously described.

Decoration: Decoration occurs on the lip, rim, and neck and is made by the same type of cord-wrapped stick or paddle edge as Manitoba Horizontal.

The designs of the type are of two major varieties, one with horizontal lines, the other without. The most numerous ones (Figure 23, Nos. 29 to 33, and Plate XVII, No. 6) have oblique cord-wrapped stick impressions on the rim above a band of short oblique cord-wrapped stick impressions or elliptical punctates slanting in the opposite direction from the upper band, thereby forming a herringbone design. This herringbone design is above a band composed of rows of horizontal cord-wrapped stick impressions on the neck that may or may not have oblique impressions at the junction of neck and body. The second variety (Figure 30, Nos. 35 and 38, and Plate XVII, No. 7) usually has only the herringbone design on the lip, rim, and upper neck but does not lie above a band of horizontal impressions. Widely-spaced, round exterior punctates also occur on the neck.

Diagnostics of the type: Oblique rows of cord-wrapped stick designs on a thickened lip, a horizontal band of oblique cord-wrapped design on an expanding slightly-outflaring rim over a horizontal band of oblique cord-wrapped design, or elliptical punctates in the opposite direction, which may or may not be above a horizontal band [of horizontal cord-wrapped stick impressions.

Temporal range: This type appears during the early part of the Manitoba Focus.

Geographical range: It appears in northern Minnesota<sup>301</sup> and eastern Manitoba but not in south-central Manitoba.

Relationships: About the same as Manitoba Horizontal.

**TYPE: Blackduck Brushed** (Plate XVII, Nos. 8 and 9).

Paste, surface finish, and vessel form: Previously described.

Decoration: This type is characterized by bands of vertical brushing on the rim and neck. Lips usually bear oblique cord-wrapped stick impressions (Figure 23, Nos. 1 to 3), and a single row of widely-spaced round exterior punctates usually occurs on the neck (Figure 23, Nos. 5 and 6). In rare cases a single band of oblique cord-wrapped stick impressions may occur on the upper rim (Figure 23, Nos. 7 to 14, 49, and 53) with or without a single or double horizontal line of cord-wrapped stick impressions, both of which are above a band of vertical brushing (Figure 23, Nos. 22, 23, and 52).

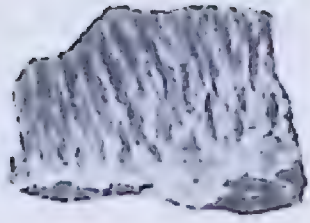
Diagnostics of the type: Oblique cord-wrapped stick impressions on a thickened lip with a band of vertical brushing on the rim and neck.

Temporal range: Probably a late Manitoba Focus type.

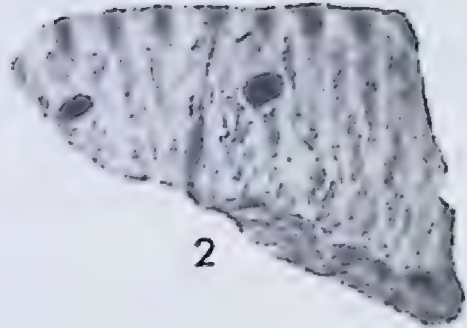
<sup>301</sup> Wilford, 1945.

PLATE XVII. Manitoba Pottery Types.

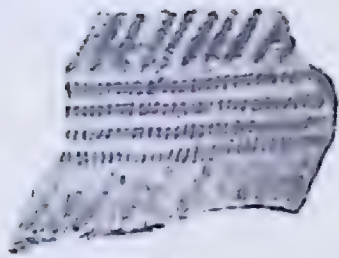
- 1, 2. Cemetery Point Corded sherds.
- 4. Mandan sherd.
- 3, 5. Manitoba Horizontal sherds.
- 6, 7. Manitoba Herringbone sherds.
- 8, 9. Blackduck Brushed sherds.



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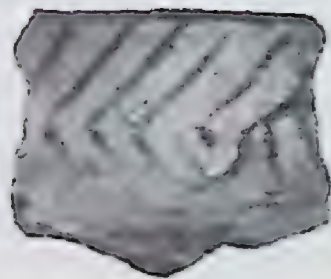
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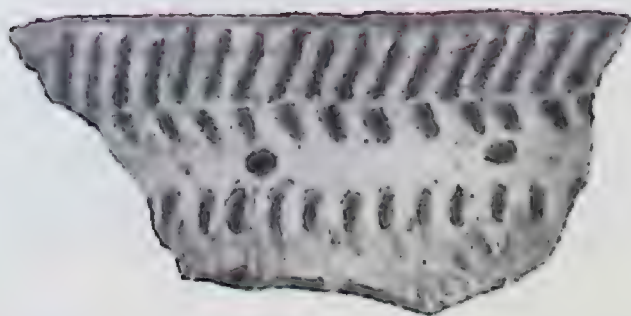
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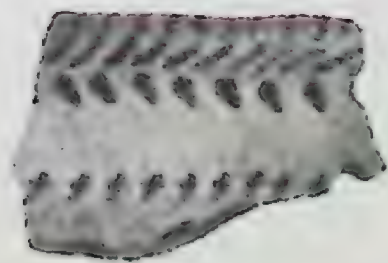
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Geographical range: This type is extremely rare in both Minnesota and southeastern Manitoba, but at the Stott site<sup>302</sup> and others in south-central Manitoba it is more frequent.

Relationships: Unknown.

**TYPE: Cemetery Point Corded** (Plate XVII, Nos. 1 and 2).

Decoration: Unlike the previous types of this ware, the group is usually without decoration and only bears cord-marking on its lip and rim. A few sherds have oblique cord-wrapped paddle-edge impressions or notches on the lip, but these are rare (Figure 23, Nos. 1 to 4).

VESSEL FORM: While these types have the same general body form as others in this ware, the necks and lips are different. About half the necks are straight and vertical (Figure 24, Nos 13, 22 to 28) like most in this ware, but many of the others are slightly out-flaring (Figure 31, Nos. 6 to 12), and a few have an incipient collar (Figure 24, Nos. 1 to 3, and 41 to 43). In contradistinction to the other lips of this ware, those of this type are usually not thickened.

Diagnostics of the type: Cord-marked grit-tempered vessels with globular bodies and straight to slightly outflaring rims.

Temporal range: Unlike other types of this ware, these rarely occur in the Manitoba Focus but are common in the early stages of the Selkirk Focus.

Geographical range: This type occurs in eastern Manitoba in the Selkirk Focus and also in south-central and western Manitoba in the Pelican Lake and Manitoba foci.<sup>303</sup> I have also seen similar sherds in southern Saskatchewan from the upper levels of Mortlach.

Relationships: This type seems to be related to a series of similar types in the northern Plains during the late prehistoric and early historic times. It may well be derived from early Manitoba Ware types but seems to have been heavily influenced by concepts involved in making Winnipeg River Ware.

#### WARE: *Winnipeg Fabric-impressed*

This classification is based on an examination of 5,509 sherds from excavation and of about 3,000 from surface collections.

#### PASTE:

Temper: The temper is mainly of crushed quartz or quartzite ranging from .025 to 2 mm. in diameter with the average (of 120 pieces of tempering) being .72 mm. in diameter. The temper appears to be in large amounts; i.e. in one cubic centimetre of sherds, 120 pieces of temper were found.

Texture: The consistency of the paste is poor in that it is angular and is characterized by numerous laminations. It may be considered to be very coarse in texture.

<sup>302</sup> MacNeish, 1951.

<sup>303</sup> Vickers: 1945.

Colour: On the exteriors there is a considerable range in colour from apricot buff, hazel, Dresden brown, neutral grey to blackish mousy-grey, with deep mousy-grey perhaps being most common. Often on one sherd exterior there is a range of three to five colours. Interiors are most often black or olivaceous black, though clay colour, pale pinkish buff, and mousy-grey also appear. In cross-section the centres of the sherds are always dark or black, and this same colour continues to the inner surface. However, usually the colour lightens toward the exterior surface, and in a few cases also toward the inner surface.

Hardness: About 3.

Thickness: A random sample of 100 sherds revealed a range from 9 to 3.5 mm. in thickness with an average of 6 mm.

Method of manufacture: The frequent lamination and lack of coilbreaks lead me to suspect that the method of manufacture may have been by paddle and anvil. The ranges in colour and hardness suggest a very poorly controlled firing technique with no attempt at using an artificially controlled draft or kiln, while the blackened interior indicates that the pots may have been fired upside down.

Surface finish (Plate XVIII). Surfaces are marked by a series of small ovoid impressions, spaced fairly close together. More than half of the sherds have been carelessly smoothed after the original impressions were made. Some of the rest, however, reveal rather clearly the method and material by which the ovoid impressions were made. Plasticine impressions of this latter group of sherds reveal that they have been made by pressing a fabric on the wet clay. The cords or elements of this fabric are between 1 and 5 mm. in width, usually roughly rectangular in cross-section. The complete lack of any small striations within the elements leads me to the conclusion that they are not cloth or fibrous string but are probably babiche (rawhide thongs). A few of them are twisted clockwise (S). Plasticine impressions reveal that the parallel elements of babiche range between 4 and 10 mm. apart and that there are not more than three types of weaving. Most common are plain space twining where two cords go alternately above and below horizontal elements (Plate XVIII, Nos. 1, 3, and 5). Related to this type is the wrapped-twine type where a single strand has been wrapped around the junction of a lattice-like frame (Plate XVIII, No. 6). The final type seems to be a simple coiled net (Plate XVIII, No. 4). Plate XVIII further illustrates the types of weaving.

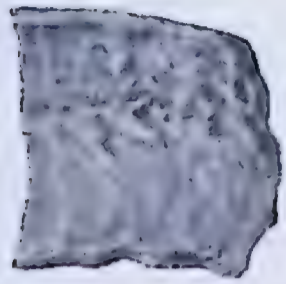
There also appears to have been two methods of pressing the babiche fabric onto the clay. By one method the babiche fabric was laid around the wet pot only once (perhaps to hold it together until it dried), and this type reveals parallel ovoid depressions. The other impressions appear to have been made by beating the pot with the fabric (perhaps wrapped over a paddle), and this type reveals a surface that is covered with short rows or parallel ovoid depressions, which are not regular or parallel one to the other.

PLATE XVIII. Manitoba Pottery Types.

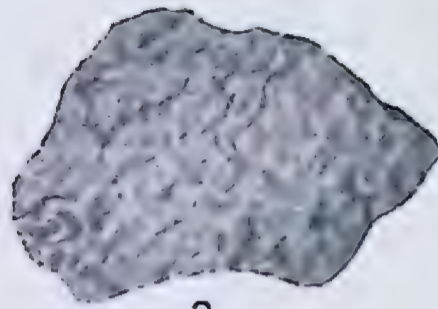
1-7. Alexander Fabric-impressed sherds.

8. Sturgeon Punctate sherds.

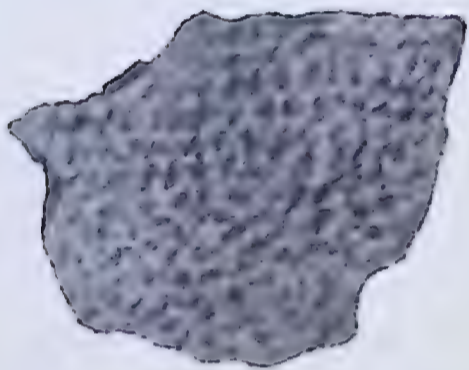




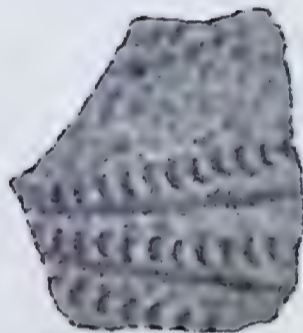
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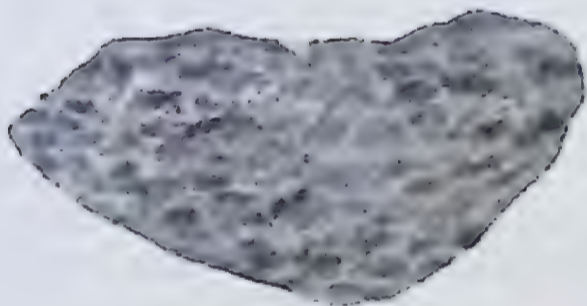
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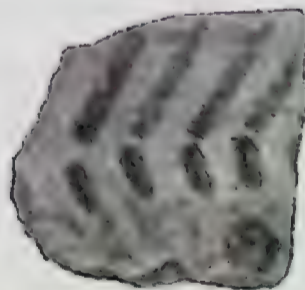
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The interior surface of the pots have been carelessly brushed smooth with a horizontal motion, and often the interior bottoms bear depressions that might have been made by the fingers.

**VESSEL FORM:** Parts of seven pots were uncovered in our excavation. Two are known from private collections. Besides these, 389 rim sherds of about 200 different vessels were found in the excavations. The following discussion is based upon these data.

**Lips:** Almost all lips are flattened; however, eight from the later three sites were pinched and rounded. There are two methods of flattening the lip. The most common way is to strike with the fabric-wrapped paddle, but almost as many seem to have been smoothed after paddling. Some are decorated by cord-wrapped paddle-edge impressions, and a few by notching. This paddling, smoothing, and decorating of the lip have the effect of making it slightly thicker than the rim below it. There is a tendency for the narrow lips to be later in time than the wide ones.

**Rims:** The majority of the rims are outflaring (Figure No. 24, Nos. 6 to 15) at an angle of about 30 to 50 degrees from the vertical axis of the pot. A few of these rims are straight (Figure 24, Nos. 6 and 8). Contrasting with this kind of rim are those that have an incipient collar; in cross-section the rim sherds from the right-hand side of the pot look like a flattened "S" (Figure No. 24, Nos. 1 to 4, 41, and 42). Slightly larger numbers of sherds of this variety are found in the later stages of the Selkirk Focus. Rims vary in length from 20 to 75 mm.

**Necks:** Necks are merely the construction at the right-angle junction of the neck and body. Actually the junction is usually slightly rounded.

**Bodies and bases:** Bodies usually have a slightly angled shoulder about one-third of the distance down the neck toward the base. The body above this shoulder is slightly convex with its upper portion welded to the rim. Below the shoulder the body gradually emerges into a wide sub-conoidal base. The bodies are greater in maximum horizontal width than they are in height.

**TYPE: Alexander Fabric-impressed** (Plate XVIII, Nos. 1 to 7)

**Paste, surface finish, and vessel form:** Given under Ware description.

**Decoration:** Decoration as such is absent on the body and rim. Sometimes the lip is marked by babiche impressions in no definite pattern (about half the lips are smoothed).

**Diagnostics of the type:** Grit-tempered vessels with flat lips, outflaring rims, constricted necks moulded to flattened globular bodies with a shoulder that bears babiche impressions all over their exteriors.

**Temporal range:** The type is mainly confined to late prehistoric and historic components of the Selkirk Focus and, generally speaking, is on the increase toward historic times.

Geographical range: The lower Red River, Berens River, and Winnipeg River valleys seem to represent the centre of concentration of this pottery type. It, however, appears at The Pas and Reindeer Lake in Manitoba and Montreal Lake in Saskatchewan.

Relationships: This type, I believe, is derived from Sturgeon Falls Fabric-impressed.

**TYPE: Sturgeon Falls Fabric-impressed** (Plate XIX, Nos. 3 to 8).

Paste, surface finish, and vessel form: Previously described.

Decoration: Decoration of this type is confined to the lip or upper rim, or both. Decoration is by cord-wrapped paddle-edge impressions, which are occasionally accompanied by elongated punctates on the neck. The cords wrapped around the stick are narrow, being between .5 and 1 mm. in width. This string appears to be round in cross-section, and it may or may not be twisted clockwise with one or two main elements or parts. Generally speaking, the cords are adjacent to each other, though a very few are almost 2 mm. apart. The rows of cord-wrapped paddle impressions are not close, being between 1 and 6 mm., averaging 3 mm. apart. Seventy-eight of the sherds bear impressions just on the lip (Figure 23, Nos. 1, 2, and 3). Twenty of these cut obliquely across the lip from left to right (Figure 23, No. 1, and Plate XIX, No. 7), while 55 cross from right to left (Figure 23, No. 2), and three are criss-crossed (Figure 23, No. 3). A second set of designs has parallel oblique cord-wrapped paddle-edge impressions on the upper rim and on the lip (Figure 23, Nos. 7, 10, and 49). In a few cases these designs are accompanied by a row of circular or ovoid impressions encircling the neck (Figure 23, Nos. 11 to 14 and 53, and Plate XIX, No. 8). Closely related to these designs is one in which there is a band of parallel oblique impressions on the upper rim placed above a slightly narrow band of parallel oblique impressions that slope in opposite directions (Figure 23, Nos. 36 to 39, and 58, and Plate XIX, Nos. 3, 4, and 7). The final class of designs, being more elaborate, has a row of parallel oblique impressions above a band composed of from two to four horizontal ones (Figure 23, Nos. 19, 22, 24, 32, 54, 55, and 59, and Plate XIX, Nos. 5, 6, and 8). This later type is similar to designs on Manitoba Horizontal and seems to be more prevalent in the earliest part of the Selkirk Focus.

Diagnostics of the type: Grit temper fabric-impressed pots with out-flaring rims and short squat-shouldered bodies that bear cord-wrapped paddle-edge decorations on their rims and lips.

Temporal range: Early part of the Selkirk Focus—late prehistoric times.

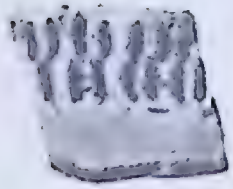
Geographical range: Eastern and north-central Manitoba.

Relationships: As stated previously, this type may well be ancestral to Alexander Fabric-impressed, and the thickened lips and cord designs suggest that it was either derived from some of the earlier Manitoba wares or received influences from them.

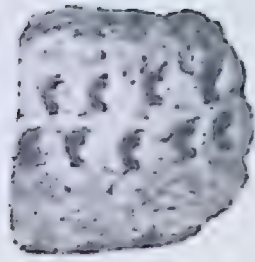
PLATE XIX. Manitoba Pottery Types.

1, 2. Sturgeon Punctate sherds.

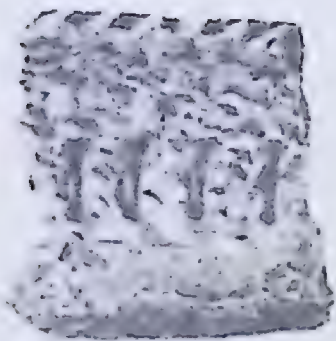
3-8. Sturgeon Falls Fabric-impressed  
sherds.



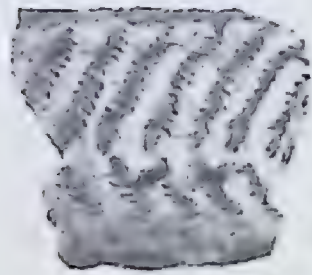
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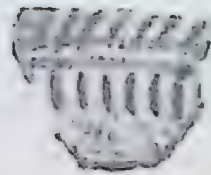
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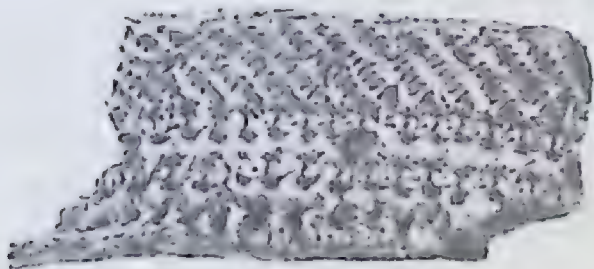
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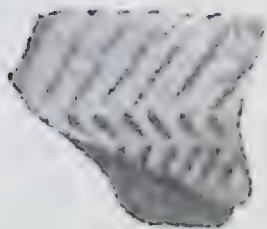
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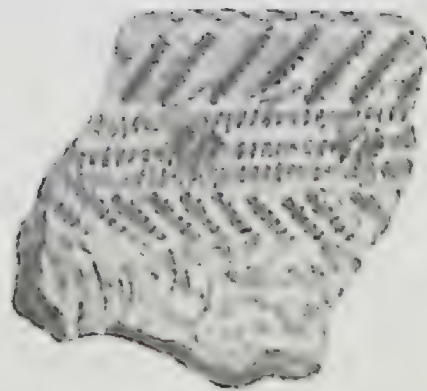
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**TYPE: Sturgeon Punctate** (Plate XVIII, No. 8, and Plate XIX, Nos. 1 and 2).

Paste, surface finish, and vessel form: Previously described.

Decoration: The decoration of this type is confined to the rim and neck. There are four kinds of punctates which occur in the order mentioned: ovoid, crescentic, rectangular, and round. There may be from one to three rows of these punctates encircling the rim. A few sherds with larger punctates and decoration on the body have also been included in this type (Plate XX, Nos. 7 and 8). These may be aberrant sherds.

Diagnostics of the type: Punctate decorations on grit-tempered fabric-impressed vessels with outflaring rims and squat-shouldered bodies.

Temporal range: Late prehistoric times.

Geographical range: This type is relatively rare in southeastern Manitoba, but surface collections indicate it is the dominant type in northern Manitoba and Saskatchewan.

Relationships: Unknown.

### Aberrant Sherds

**TYPE: Laurel Pseudo Scallop Shell** (Plate XX, No. 6). Only two came from excavations. I have seen about 50 in surface collections.

Paste and surface finish: Previously described under Laurel Ware.

Decoration: The design appears to have been made by impressing the edge of a scallop shell or edge of a piece of bone, notched alternately on one side and then the other, into the wet clay of the pot. Most of the pieces found in excavation show a series of parallel horizontal impressions about 5 to 10 mm. apart (Figure 23, No. 15). However, rim sherds from surface collections indicate that there are often parallel oblique or vertical impressions on the rim and horizontal ones on the upper body (Figure 23, Nos. 19, 20, and 28). Exterior nodes appear on one specimen.

Vessel form: Only a few rim sherds, from surface collections, exist. These show rim forms (Figure 24, Nos. 1, 19, and 30).

Diagnostics of the type: Pseudo scallop shell impression composing horizontal lines on the upper body and oblique or vertical lines on the insloping rim of small-mouthed jars.

Temporal range: At Lockport this type appears in Levels 7 and 8 in the late part of the second earliest ceramic complex.

Geographical range: This type seems to have its greatest concentration in the Lake of the Woods area of northern Minnesota and westernmost Ontario.<sup>304</sup> The type is rare in the Red River area and practically unknown farther west in Manitoba.

Relationships: The closest relationships of this type seem to be with the St. Lawrence Pseudo Scallop Shell type of the Northeast.<sup>305</sup> The identical technique of design and design motifs points to some sort of genetic connection between the two areas or an early ceramic level.

<sup>304</sup> Wilford, 1955.

<sup>305</sup> Ritchie and MacNeish, 1949.

**TYPE: Net-impressed Ware** (Plate XVI, No. 1). Only 58 sherds of this ware were examined.

**Paste:** The paste is about the same as that of Laurel Plain Ware.

**Surface finish:** The exterior surfaces of this ware bear the impressions of a knotted net. The net is made of fine cords from .5 to 1 mm. in diameter that have been Z-twisted (counter-clockwise). Their small diameter suggests two yarns. The mesh of the net is between 5 and 20 mm. The cords seem to have been tied by either "cow hitch" or "reef hitch" knots. Many of the impressions have been smoothed over so that only the knots are apparent.

**Decoration:** Unknown.

**Vessel form:** Only one rim sherd of this ware is known, and it is from an insloping small-mouthed jar with a pinched lip (Figure 24, rim cross-section 30).

**Temporal range:** At Lockport this ware has roughly the same range as Laurel Plain Ware, appearing in Levels 5 to 10.

**Geographical range:** Unknown.

**Relationships:** Unknown.

**TYPE: Fugitive Red Ware.** Only 15 sherds of this ware were examined.

**Paste:** The paste is identical to that of Laurel Plain Ware.

**Surface finish:** Surfaces have been smoothed, and the exterior surfaces bear a thin film of red ochre that evidently was applied after firing.

**Decoration and vessel form:** Unknown.

**Temporal range:** The type appears from Levels 5 to 8 at Lockport.

**Geographical range:** The type is in the Red River Valley and in the Rock Lake region of Manitoba.

**Relationships:** Unknown.

**TYPE: Mandan-like Ware** (Plate XVII, No. 4). One sherd of this ware occurred in 1947 excavations at Lockport in levels that are considered to have been deposited by the peoples of the Manitoba Focus.

**Paste:** This sherd is grit-tempered with a laminated interior structure and is brown on the surfaces though dark in the interior. It has a hardness of about 3.

**Surface finish:** From this very small decorated sherd the surfaces seem to be smooth underneath the decorations, and the interiors are smooth.

**Decoration:** Decoration consists of two parallel lines made by impressing a twisted cord into the wet clay.

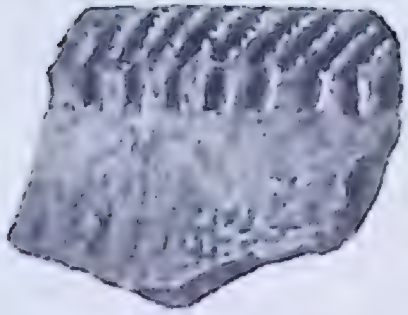
**Vessel form:** Unknown.

**Temporal and geographical range:** The single sherd of this ware is the only one of its kind that I know of in eastern Manitoba. It appeared at Lockport in Manitoba Focus levels.

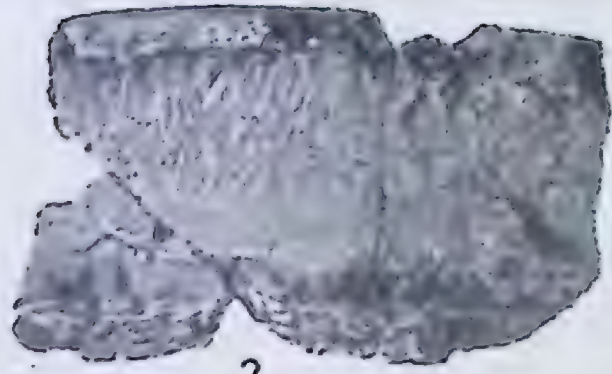
## PLATE XX. Manitoba Aberrant Sherds.

1. Aberrant form of Sturgeon Falls  
Fabric-impressed sherds.
2. Pelican Lake sherd.
- 3, 4. Upper Mississippi sherds.
5. Shell-tempered Cord-marked sherd.
6. Laurel Pseudo Scallop Shell sherd.
- 7, 8. Aberrant Sturgeon Punctate sherds.





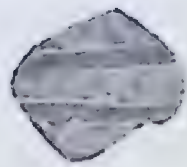
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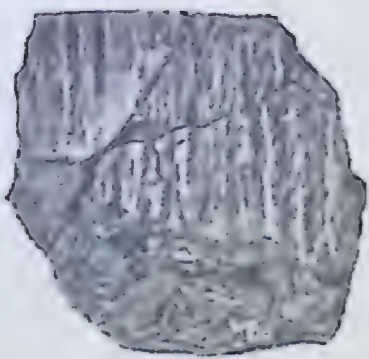
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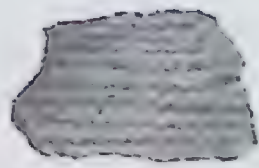
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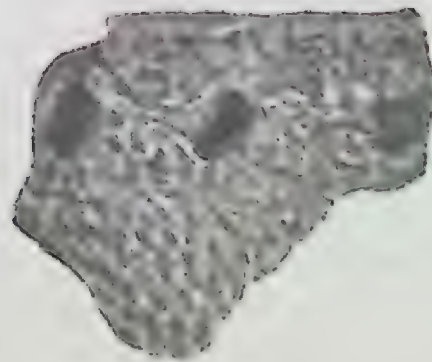
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Relationships: This sherd probably comes from along the Missouri River in the state of North Dakota and is extremely similar to those found on sites that are considered to have been occupied by the Mandan.<sup>306</sup>

**TYPE: Shell-tempered Cordmarked Ware (Plate XX, No. 5).**

Paste: The temper of this ware is of crushed shell in abundant amounts. Interiors of sherds are laminated, and the pottery is soft, being about 2 in hardness.

Surface finish: Exterior surfaces bear cord-marking.

Decoration and vessel form: Unknown.

Temporal range: Sherds of this ware occur in the late prehistoric components of the Selkirk Focus, namely the Waulkinen site and Level 2 of Lockport.

Geographical range: Unknown.

Relationships: Upon seeing these sherds, Dr. Wilford, of the University of Minnesota, suggested they had been traded in from Upper and Middle Mississippi components of Southern Minnesota.

**TYPE: Pelican Lake Ware (Plate XX, No. 2).**

Paste: Grit-tempered with a laminated interior structure, about 3 in hardness and usually a mousy grey-brown in colour.

Surface finish: Surfaces have been cord-marked and then smoothed over on the exterior surface, but the lips are always smoothed and flattened.

Decoration: Decoration, when it occurs, is by notching at the junction of the interior and/or exterior rim and the lip.

Vessel form: The rim sherds I found have shapes 2, 3, 4, and 7 of Figure 4.

Temporal range: Mainly associated with the Selkirk Focus at Alexander's Point site and Level 2 of Lockport. However, two sherds did occur at Level 5 of Lockport.

Geographical range: The type is mainly found in the Pelican Lake Focus of southeastern Manitoba and also occurs in eastern Saskatchewan.

Relationships: Unknown.

**TYPE: Upper Mississippi Sherds (Cambria Type A) (Plate XX, Nos. 3 and 4).** All of these grit-tempered sherds with deeply incised trailed lines belong to the Cambria Type A from Upper Mississippi sites in Minnesota.<sup>307</sup> Since Wilford has described this type in some detail and since he identified the sherds from Lockport and Alexander's Point as belonging to this type, no further comment seems necessary.

<sup>306</sup> Will and Hecker, 1944.

<sup>307</sup> Lloyd A. Wilford, 1945b, pp. 36-37.

### *Clay Discs*

Two clay discs (30 and 35 mm. in diameter and about 10 mm. in thickness) with roughened surfaces occurred in Levels 1 and 2, respectively, of the Cemetery Point site. They appear to have been associated with the remains of the Selkirk Focus. These might have been gaming discs.

## PART VII

### ANIMAL BONE

Numerous fragments of animal bone, most of which represent remnants of animals that had been killed and eaten by the ancient inhabitants of Manitoba, were found with the artifacts. A study of them contributes significant information on the ancient environment, food habits, subsistence, ways of preparing food, and way of life.

There were a number of limitations to this study that make the conclusions of this section tentative. First of all, slightly over one half of the bone material was composed of small fragments or splinters that were not identifiable. Secondly, the collections of comparative zoology of the National Museum were such that many of the long bone fragments were not identified and most of them could be only identified as to family or genus rather than exact species. Thirdly, certain layers or sites did not yield preserved bone remains. And, finally, neither time, personnel, nor funds were available for the identification of all the bones from some of the smaller sites.

However, it was possible for Dr. Austin Cameron, zoologist, of the National Museum of Canada, to study certain long bones, skull fragments, antlers, and teeth from the Lockport and Larter excavations. With his help I was also able to identify most of the bones from the lower levels of Cemetery Point. In total, 2,570 fragments were identified from the six archaeological horizons. These, even without the still unidentified bones from the other sites, appear to compose an adequate sample.

The examination of bones reveals that the earliest people, those of the Whiteshell and Larter foci, subsisted primarily on buffalo. This may be interpreted as indicating that perhaps at the time of their occupation the Whiteshell area had primarily a plains or prairie flora to which the bison is adapted. Furthermore, since buffalo is a migratory animal, it may mean that these people were nomadic hunters living for much of the year in small groups. Such a conclusion is confirmed by the relatively small area of the refuse of the Whiteshell Focus at Cemetery Point as well as the small zone of thin deposit of Floor 1 at the Larter site. The relatively large size of projectile points from the Whiteshell Focus would suggest that these nomadic hunting groups used the spear or dart. Most of the Larter points are of about the same size, and they may have been using the same method, but a very few smaller ones were found that might have been arrow points. Scrapers indicate that bison skins were an important by-product of the hunting, but undoubtedly the primary reason for hunting was to obtain buffalo meat. The meat itself was probably roasted on hot rocks since pits of fire-cracked rocks occurred at the Larter site, and at both Cemetery Point and Larter a few burned buffalo bones were found. As many bones from these two foci show interior scraping, it may be concluded that marrow was

Table 8. Distribution of identifiable bones and shells in some of the excavated sites in southeastern Manitoba.

| Foci         | Sites                                                                                 | Levels | Total      | Bison (buffalo) | Mollusca (clamshell) | Cervus (elk) | Odocoileus (deer) | Probably Odocoileus (deer) | Rodentia (probably muskrat) | Aves (birds) | Ursus (bear) | Reptilia-chelonia (turtle) | Agnatha (fish) | Lepus (hare) | Castor (beaver) | Canis (wolf?) | Alces (moose) |
|--------------|---------------------------------------------------------------------------------------|--------|------------|-----------------|----------------------|--------------|-------------------|----------------------------|-----------------------------|--------------|--------------|----------------------------|----------------|--------------|-----------------|---------------|---------------|
| SELKIRK..... | Lockport (1951).....                                                                  | 1      | .....      | 4               | 2                    | .....        | .....             | 3                          | 1                           | 1            | .....        | .....                      | 43             | .....        | .....           | .....         | 2             |
|              | Lockport (1951).....                                                                  | 2      | .....      | 1               | 18                   | .....        | 2                 | 17                         | 1                           | 19           | 1            | 1                          | 365            | .....        | 4               | 1             | .....         |
|              | Lockport (1951).....                                                                  | 3-4    | .....      | 6               | 4                    | 1            | 1                 | 19                         | 1                           | 6            | .....        | .....                      | 272            | .....        | .....           | .....         | .....         |
|              | Total identified bones for the focus.....<br>Percentages of bone types for focus..... | .....  | 795<br>100 | 11<br>.01       | 24<br>.03            | 1            | 3                 | 39<br>.05                  | 3                           | 26<br>.03    | 1            | 1                          | 680<br>.87     | .....        | 4<br>.01        | 1             | 2             |
| MANITOBA.... | Lockport (1951).....                                                                  | 5      | .....      | 14              | 30                   | .....        | 2                 | 19                         | 1                           | 13           | 2            | .....                      | 186            | .....        | 2               | 1             | .....         |
|              | Lockport (1951).....                                                                  | 6      | .....      | 11              | 3                    | .....        | 1                 | 12                         | .....                       | 6            | 1            | .....                      | 153            | 2            | .....           | .....         | .....         |
|              | Total identified bones for the focus.....<br>Percentages of bone types for focus..... | .....  | 459<br>100 | 25<br>.05       | 33<br>.07            | .....        | 3                 | 31<br>.07                  | 1                           | 19<br>.02    | 3<br>.01     | .....                      | 339<br>.75     | 2            | 2               | 1             | .....         |
|              | Lockport (1951).....<br>Lockport (1951).....                                          | 7<br>8 | .....      | 19<br>16        | 16<br>16             | 1<br>2       | 1                 | 4<br>6                     | .....                       | 4<br>2       | .....        | 1                          | 124<br>84      | .....        | 2<br>1          | .....         | .....         |
| NUTMIK.....  | Total identified bones for the focus.....<br>Percentages of bone types for focus..... | .....  | 299<br>100 | 35<br>.12       | 32<br>.11            | 3            | 1                 | 10<br>.03                  | .....                       | 6<br>.02     | .....        | 1                          | 208<br>.70     | .....        | 3<br>.01        | .....         | .....         |

|              |                                           |     |       |     |       |       |       |       |       |       |       |       |       |   |   |   |
|--------------|-------------------------------------------|-----|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|---|---|
| ANDERSON...  | Lockport (1951).....                      | 9   |       | 47  | 36    | 2     | 1     | 4     | 2     | ..... | 90    | 1     | ..... |   |   |   |
|              | Lockport (1951).....                      | 10  |       | 43  | 2     | ..... | ..... | 3     | 3     | ..... | 39    | 1     | ..... |   |   |   |
|              | Total identified bones for the focus..... |     | 275   | 90  | 38    | 2     | 1     | 7     | 5     | ..... | 129   | 2     | ..... |   |   |   |
|              | Percentages of bone types for focus.....  |     | 100   | .33 | .14   | .01   | ..... | .02   | .02   | ..... | .47   | .01   | ..... |   |   |   |
| LARTER.....  | Lockport (1951).....                      | 11  |       | 56  | 1     | ..... | ..... | ..... | ..... | ..... | 1     | 13    | ..... |   |   |   |
|              | Larter.....                               | 3-4 |       | 408 | 8     | ..... | 2     | 3     | 4     | ..... | ..... | ..... | ..... |   |   |   |
|              | Lockport (1951).....                      | 12  |       | 50  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |   |   |   |
|              | Total identified bones for the focus..... |     | 547   | 514 | 9     | ..... | 2     | 3     | 4     | ..... | 1     | 13    | ..... |   |   |   |
|              | Percentages of bone types for focus.....  |     | 100   | .94 | .02   | ..... | ..... | ..... | ..... | ..... | ..... | .02   | ..... |   |   |   |
| WHITESHELL.. | Cemetery Pt.....                          | 4   | 195   | 187 | 7     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... |   |   |   |
|              | Percentages of bone types for focus.....  |     | 100   | .96 | .04   | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |   |   |   |
|              | GRAND TOTALS.....                         |     | 2,570 | 862 | 143   | 6     | 10    | 90    | 5     | 60    | 5     | 3,369 | 4     | 9 | 2 | 2 |

utilized as food. The fact that much of the bone was broken into very fine splinters may indicate that some sort of soup had been made of smashed bone and meat. There were a few fish bones in the Larter levels of Lockport, suggesting that the meat diet was occasionally supplemented by fish. Also the barbed bone point at Cemetery Point may suggest that fish were speared. A few fragments of shell, often burned, are the only evidence we have of these peoples' food-collecting activities.

This plains-prairie way of life seems to be changing by Late Larter times, as a few animal bones of deer and bear occur in the refuse. Furthermore, charcoal from the lowest floor level at Lockport has been identified as being elm and ash. Perhaps the Aspen Parklands had begun moving up the Red River valley in this time period.

The Anderson Focus sees further evidence of this shift, as bones of elk and hare occur along with those previously mentioned. However, the most noticeable change is the numerous fish bones. The occurrence of net-impressed pottery suggests that the fish were caught in nets. One might guess that their life was now less nomadic and the groups were larger in size because of their heavy reliance on fishing, a more reliable food source in eastern Manitoba.

The bones found associated with the remains of the Nutimik and Manitoba foci show the continuation of the trends initiated in Anderson. The food complex at this time includes elk, deer, bear, beaver, wolf, and muskrat, and certainly indicates a replacement of plains-prairie environment by either Aspen Parklands or pine forests. The occurrence of smaller animal bones may mean that the use of traps or snares became more common. The larger size of the sites implies that the people began living in larger groups and were more sedentary during at least some part of the year. The projectile points, of course, illustrate that many animals were hunted, and the prevalence of very small points in the Manitoba Focus shows that the bow and arrow was a predominant weapon by Manitoba Focus times. Roasting pits still occur with the Manitoba and Nutimik foci. Carbon adhering to the inside of many potsherd fragments gives evidence that boiling of food in clay receptacles was very common. Shell remains show the continuance of foraging for molluscs.

The bone fragments from the Selkirk Focus are little different from those of the previous horizon, except that moose bones and teeth occur. This is good evidence that much of southeastern Manitoba during this time period was covered by a pine forest as it is at present. The subsistence at this time was definitely based on fishing, with the hunting of moose, deer, buffalo, bear, and wolf; the trapping of hare, beaver, and muskrat; and food-gathering of shells, plums, and wild rice being of secondary importance. Such a subsistence pattern would allow for larger, more sedentary groups. This is confirmed by sites that are uniformly large, even though the depth of refuse is not great. It is interesting to note that many of these larger camps are at spots along the waterways that even at present yield great quantities of fish. Perhaps large seasonal fishing bands may be considered characteristic of Selkirk times.

Thus in southeastern Manitoba, with a shift in ecology from a plains to a forest zone, the way of life changed from nomadic buffalo hunters living in small groups to seasonally sedentary fishing and trapping peoples who seasonally gathered into relatively large bands or communities.

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